THE NEVV FIERIE

SEA-COLOMNE

Wherein the faults, and miſtakings, of the former contrefaited *Lichtning Colomne*, are plainely diſcouered, and corrected,

BY

Iacob Colom.

With a breefe Inſtruction in the Art of Navigation, and an Almanach, from the yeare 1649, unto the yeare 1660.

VVith Priviledge,

for 18. yeares.

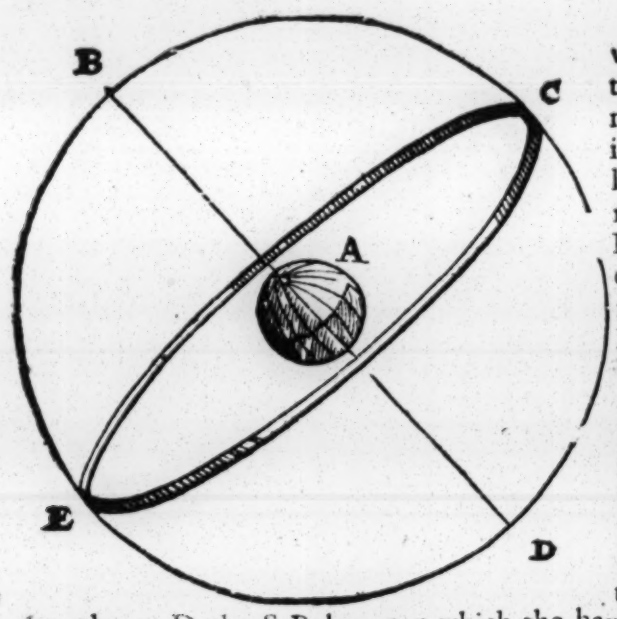
AMSTERDAM, By Iacob Colom, on the Water, in the Fierie Colomne, ANNO 1649.

BIBLIOTECA NACIONAL

A breefe Instruction in the art of Navigation.

Of the two Poles of the World.

THe Earth with the waters doe make both togethe. a perfect and juſt round Globe, which al the Mathe, maticans by good & infallible reaſons doe confirme as alſo by experince is found ſo to be. This Globe, the Eternall and omnipotent God hath firmely placed in the middle of the World, as the Center or middle poynt there of and hath placed the havens as a hallow Globe, with ſuch an unmeaſurable wyneſſe round about the ſame, that the diſtance thereof is equally ſet, and ſeparated from the earth in all places, like unto the compaſſe of a circle, which is equally drawne and ſeparated from the middle poynt thereof: and hath ſo ordained, that every 24 hours it is carried about the World: by which dayly motion, it draweth with it all the heavenly lights, as the Sunne, Moon, and all the Starres, which alſo by that means in 24 houres are carried round about the whole World, as is dayly ſeene. The moving or ſtirring of the heavens is brought about upon two ſure poynts, that ſtand directly one againſt the other, in ſuch manner, as if a bale ſhould be turned round upon two pins, as upon an Axeltre. Suppoſe that you ſee a ſtraigt line, ſtreaching out from one of the aforeſayd poynts of the heavens to the other, like unto an Axeltre of the World, that paſſed right through the center, that is through the middle of the earth and two poynts aforeſayd, the Pooles or Axeltre poynts of the World, the one named the ſouth Pole: Now that this may be better underſtood, I will manifeſt it by this figure.



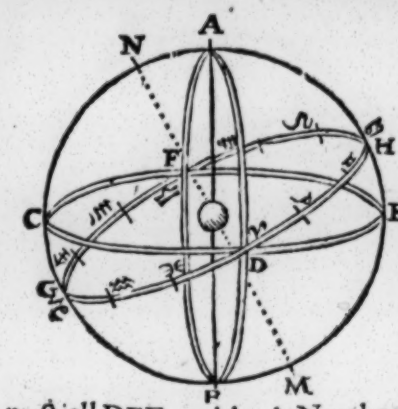
This figure A ſheweth the Globe of the earth, which unmoveable ſtandeth in the middle of the heavens, which hereby the circle of B C D E is figured out. The line that reached from B to D going through the Earth, ſignifieth the Axeltre of the World, & the point from B to D is the Pole or Axeltrees poynt, where of the one at B is called the north Pole, and the other at D the S. Pole, upon which the havens (as I ſaid before) every 24 houres are moved and borne round about the whole Earth.

Of the Equinoctiael Line.

The whole circle of the Heavens is devided into 360 degr. or ſteppes, ſo that by the former chapter we may perceive, that the two Poles re diſtant one from the other 180 degr. that is a half circle of the hea-ens. Right in the middle betweene both the Poles we ſuppoſe a cir-le to he placed, which we call Line, or the Equator, and is ſo called becauſe that when ſo ever the Sun cometh to his circle the day and night .re of one length through out all the World. This circle is in all places quall diſtant from both the Poles of the World, to wit, 90 degrees, nd devided the heavens into two equall parts, whereof the one reached northward, and is called the north part, the other ſouthward, and is called the ſouth part, as is plainly ſee in the former figure: where you ſee he ſouth part, as is plainly ſeene in the former figure: where you ſee the hindle, E C is the Equinoctiall line, ſtanding both of one length from the Poles E D, deviding the Heavens into two equall parts, as the north parth E B C, and the S. Part E D C.

Off the Ecliptica line or Sunne-way.

The Line Ecliptica lieth thwart over againſt the Equinoctiall deviding the ſame upon two poynts, right over againſt each-other, in two even alike parts, and is alſo devided through the foreſayd 2 a like parts, the one lieth betwixt the Equinoctiall and the norther Pole, the other betwixt the Equinoctiall and the ſouther Pole, the moſt part is drawing off on both ſides of the Equinoctiall to both Poles in 23 degrees, 31 and an halfe minutes. The Ecliptica is devided in 12 parts, each of the ſame is deſcribed with a particular marke. The Sunne goeth along this Circle (without eternal turning out) and runneth through the ſame once every yeare with her owne native running, and ſo as the Poles of the World doe ſtand all over even farre of the Equinoctiall, alſo hath this Ecliptica his two Poles al over even far or diſtant from the ſame.



Explication.

In theſe figure are (as before) A B the Poles of the World, C D E F the Equinoctiall, G D H F the line Ecliptica, deviding the Equinoctiall, and alſo himſelfe, in 2 a like parts; in points D and F, which are called Equinoctials, the one on D the Equinoctium of the Spring, the other on F the Equinoctium of the harveſt The one halfe part D H F (being the norther part) lieth betwixt the Equinoctiall DEF, and the A Norther Pole, upon the moſt on E H, turning off three and twentie degrees, 31 minutes and an halfe, the other halfe part F G D (the ſouther part) lyeth betwixt the Equinoctial F C D, and the ſouther Pole B, as alſo upon the moſt part, like as C G, turning off 23 degrees, 31 minutes, and an halfe. The north part is devided in ſix ſignes, which are called the northermoſt, beginning on D, with the riſing ſignes to the north, Aries, Taurus, Gemini, untill H, the point of the moſt drawing off. From thence with the down-going ſignes of the North, Cancer, Leo, Virgo, untill the Equinoctiall Line in F the Equinoctium of the harveſt. The ſouther part is alſo devided in ſixe ſignes, which are called the ſouthermoſt, beginning on F, with the down-going ſignes to the ſouth, Libra, Scorpius, Sagitarius, untill G, the point of the moſt turning off to the ſouth, from thence forth with the riſing ſignes to the north, Capricornus, Aquarius, Piſces, till againe on the Equinoctiall Line, and the Equinoctium of the Spring D. The 3 firſt northermoſt ſignes runneth the Sunne through of the 21 of march, till the 21 of Iune, the other 3 of the 21 Iune, til the 23 of September. The firſt 3 ſouthermoſt of the 23 September, til the 23 of December, the other of the 23 of December, til againe to the 21 of March. The Poles of the Ecliptica are, & N. ſtanding al over even farre from the Ecliptica G H, & ſo farre from the Poles of the Earth A & E, when the Ecliptica upon the moſt is drawing off from the Equinoctial Line on H E and C G, to witt, 23 deg, 31 min. and an halfe.

Of the Colures.

Coluri are 2 Circles, going Croſſe-wiſe through both the Poles of the World, deviding each-other in the Poles in 2, and together the whole Sphera Equinoctial, Sodiac, or Ecliptica, & al Paralelles in 4 a like parts, the one going through the points of the Equinoctes, called Colurus of the Equinoctes, the other through the points of the Solſtities, the Colurus of the Solſtities. The Sunne touching theſe Circles (through his yearly running in the Sodiac) devideth the yeare in four parts, to wit, Spring, Summer, Harveſt, and Winter.

Explication.

In this former Figure is A F B D, the Colurus of the Equinoctes, going through D and F, the poynts of the Equinoctes, in the beginning of Aries and Libra, and through the Poles A and B A C G B M E H, the Colurus of the Solſtities, going through H & G, points of the Solſtities, in the beginning of Cancri & Capricorni, where the Ecliptica is upon the moſt drawing off from the Equinoctiall line, through the Poles of the World, and Sodiax M and N, cutting one another through croſſe-wiſe with right corners in the Poles A and B, and deviding the Sodiac or Ecliptica in 4 parts, as D H, H F, and G D, where of the Sunne in the firſt takes his courſe in the Spring, the Second in the Summer, the third in the Summer, the third in the harveſt, and the fourth in the Winter.

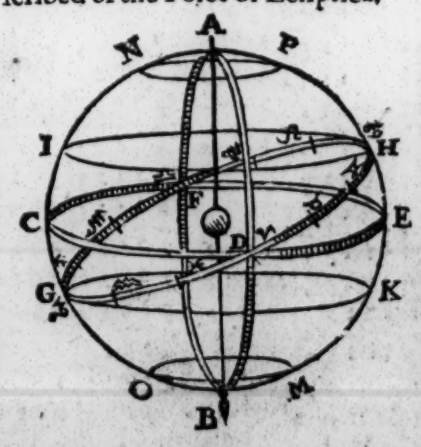
Theſe foreſaid Circles of the Sphere, are al great Circles, that is upon the wideſt of the Sphere round about written, deviding the ſame alwaies in two a like parts. There follow further four little Circles, which doe devide the Sphere in unlike parts.

Of the Tropikes and Circles Arcticus and Antarcticus.

Tropici are two Circles, the one northward, and the other ſouthward of the Equinoctiall, and even wide with the ſame, which through the turning round about of the Sphere, of the poynts of the Ecliptica, is deſcribed to be the wideſt diſtant from the Equinoctial the one to the north called Tropicus Cancri, the other to the ſouth, Tropicus Capricorni.

Circulus Arcticus, the norther Circle, and Circuls Antarcticus, the ſouther Circle, are (through the turning round about of the Sphere) deſcribed of the Poles of Ecliptica.

Explication.



In this figure is the Tropicus Cancri or Sunne-turning of the kreeft, which through the turning round about of the Sphere is deſcribed of the poynt of H, the beginning of Cancri is alſo called, becauſe the Sunne, (comming to that poynt upon the wideſt from the Equinoctiall to the north) turneth then againe through the kreeft un. to the Equinoctiall. G, K, is the Tropicus Capricorni, Sun-turning

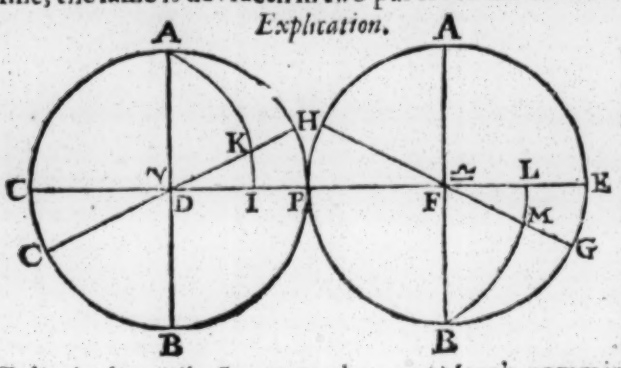
of the Stone-bock, is described through the turning round about of the Sphere of the poynt G, the beginning of Capricorni is so called, because the Sun, coming on that point upon the wideſt from the Equinoctiall to the south, turnes then again through to the Stonbock to the Equinoctial.

N P, is the Circulus Arcticus, and M O, the Circulus Antarcticus, which are described through the turning round about of the Sphere, of the Poles of the Sodiac N and M. These are even farre distant from the Poles of the World A and B, also as the Tropicus from the Equinoctial line, to wit, 23 degrees, 31 minutes and a half.

Of the Declination of the Sunne.

The Declination of the Sunne hath his distance of the Eqinoctiall line, the same is devideth in two parts: to the N. and to the S.

Explication.



The Declination of the Sunne comes out of his running along the Ecliptica line, after this manner: leave A his norther and B the souther Pole of the World, C P F the Equinoctiall, N H G the Ecliptica line. The Sun upon the 21 of March, comming in the beginning Arietis on D, comes also in the Equinoctiall line and hath therefore no Declination, northerly nor southerly but going forth along the Ecliptica of D to H, and comming til on K, in the beginning of Cancri, he shall be removed or declined from the Equinoctiall line to the north, from I to K, 11 degrees, 20 min. Going so forth till on H, is upon the most declined from P to H, 23 degr. 31 min. and a half. From thence following his course from H, to F, comes in the beginning of Libra again on the Line without Declination. Going forth from F to G, til in M, the beginning of Sagitary, he shall then be removed or declined from the line F E, to the south of L unto M, 20 degrees, 13 minutes. Comming on G, he is from E to G declined to the south, from thence he runnes then on D, againe on the Equinoctiall linie, finishing the same running in a yeare.

For to finde the Declination of the Sunne upon every day of the yeare.

The Sunne-yeare (that is the time that the Sun goeth out a certaine poynt in the Ecliptica, and turneth againe in the same) is even with 355 dayes, but about 5 houres and 49 minutes more (that is somewhat lesse then 6 houres) wherefore men must alwayes after 3 yeares unto the fourth, 4 times 6 hours (that is a day in February) bring thereunto, for to count the year or revolution of the Sunne in even dayes, the same fourth yeare is therefore called the leape yeare. If you then will sett the Declination of the Sunne by the Tables of the Day, then you must needs make 4 Tables asunder of 4 years following after another. The foresaid difference, that foure revolutions of the Sunne doe not even agree with such 4 yeares, brings in time so much difference in the Declination, that it is necessary at least every 20 yeares to renew such Tables. For to finde out of such Tables upon every day of the yeare the Declination of the Sunne must needs two things be knowne, the first, in what yeare we are, or in the leape-yeare, or in the first, second, or third thereafter. The second, what Table men must use to such a well known yeare.

For the first, devide the yeares of our Lord above 1600 through 4, if the deviding comes even out, without being to much, such yeare is then a leap yeare of 366 dayes, but if out of the deviding remaines any number, the same will shew your desire how many years it is after the leap-years.

Explication.

I desire to know what for a year the year, 1648 is, leaving the 1600 I devide these that are over 48, through 4, that comes even out without remaining (for 12 tims 4 is 48) whereby I finde the yeare 1648 to be a leape-year.

II. Explication.

For to know what the yeare 1647. may be for a yeare, leaving the 1600, I devide the 47 through 4, and find that there remaine 4 (for 11 times 4 is 44, the same from 47. remaines 3) out of which I finde the yeare 47. to be the third yeare after the leape yeare.

For to know the same without account, looke upon this following litle Table, the first Coloumne are leape-years, the second third & fourth Columnes, are 3 yeares after the leape-yeares.

Leape-yeares	*First*	*Second*	*Third.*
1648	1649	1650	1651
1652	1653	1654	1655
1656	1657	1658	1659

The second, for to know what Table men must use, for every yeare, that stands above each of the following Tables noted.

I Explication.

In the second yeare after the leape-yeare upon the 20 of May, I desire to know the Declination of the Sunne, I seeke in the Tables, in the second yeare of the moneth May and there under in the first Columne, the figgers of the twentiest day, finde there besides in the second Columne 20,6, that is 20 degrees, 6 minutes the Declination of the Sunne. And because that is betwixt the 20 of March and the 23 September, (that the Sunne is by north the Line) also is the Declination northerly.

II Explication. Upon the 12 February of the Leape-yeare I desire to know the Declination of the Sunne, and seeke therefore in the Table of the Leape-year the moneth of February, & count in the first Colomne the 12 day, finde there next unto 13 degr. 43 min. before the Declination of the Sunne upon the same day, because that is betwixt the 23 of September, and the 20 of March, that the Sunne goeth by south the line, the Declination is then southerly.

Here follow the Tables of the Declination of the Sunne, justly accounted upon the length of the Earth, of the Meridiaen of Englands-end, the reason is because they are most used about the length of the Nederlanders, mariners, as well in doing on of the Channell of the Sea, as alongs the Coasts of France, Portugall, and Spaine.

Table, of the Declination of the Sunne. New Stile, Vpon the LEAP-YEARE.

Ianuarius.			Februari.			Martius.			Aprilis.			Maius.			Iunius.			Iulius.			Augustus.			Eq.	Septem.			October.			Novem.			Decemb.		
da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.		da.	de.	mi.	da.	gr.	mi.	da.	de.	mi.	da.	de.	mi.
1	23	5	1	17	8	1	7	13	1	4	55	1	15	22	1	22	13	1	23	9	1	17	57		1	8	6	1	3	27	1	14	44	1	22	1
2	23	0	2	16	51	2	6	50	2	5	18	2	15	40	2	22	21	2	23	5	2	17	42		2	7	43	2	3	51	2	15	3	2	22	10
3	22	54	3	16	33	3	6	27	3	5	41	3	15	57	3	22	28	3	23	0	3	17	26		3	7	21	3	4	14	3	15	22	3	22	18
4	22	48	4	16	16	4	6	4	4	6	4	4	16	14	4	22	35	4	22	55	4	17	10		4	6	59	4	4	38	4	15	41	4	22	26
5	22	41	5	15	57	5	5	41	5	6	27	5	16	31	5	22	42	5	22	49	5	16	54		5	6	37	5	5	1	5	15	59	5	22	34
6	22	34	6	15	39	6	5	17	6	6	50	6	16	48	6	22	48	6	22	43	6	16	37		6	6	14	6	5	24	6	16	17	6	22	41
7	22	27	7	15	20	7	4	54	7	7	12	7	17	5	7	22	54	7	22	37	7	16	20		7	5	52	7	5	47	7	16	35	7	22	47
8	22	19	8	15	1	8	4	30	8	7	34	8	17	21	8	22	59	8	22	30	8	16	3		8	5	29	8	6	10	8	16	52	8	22	54
9	22	10	9	14	42	9	4	7	9	7	57	9	17	37	9	23	4	9	22	23	9	15	46		9	5	6	9	6	33	9	17	9	9	22	9
10	22	2	10	14	22	10	3	43	10	8	19	10	17	52	10	23	8	10	22	15	10	15	28		10	4	43	10	6	56	10	17	25	10	23	4
11	21	52	11	14	3	11	3	19	11	8	41	11	18	8	11	23	13	11	22	7	11	15	10		11	4	20	11	7	19	11	17	42	11	23	9
12	21	43	12	13	43	12	2	56	12	9	2	12	18	23	12	23	16	12	21	58	12	14	52		12	3	56	12	7	42	12	17	58	12	23	14
13	21	35	13	13	23	13	2	32	13	9	24	13	18	37	13	23	20	13	21	50	13	14	33		13	3	34	13	8	5	13	18	14	13	23	18
14	21	22	14	13	2	14	2	9	14	9	46	14	18	52	14	23	23	14	21	41	14	14	14		14	3	11	14	8	27	14	18	30	14	23	21
15	21	11	15	12	41	15	1	45	15	10	7	15	19	6	15	23	25	15	21	31	15	13	55		15	2	48	15	8	49	15	18	45	15	23	24
16	21	0	16	12	21	16	1	21	16	10	28	16	19	19	16	23	27	16	21	21	16	13	36		16	2	25	16	9	11	16	19	0	16	23	26
17	20	48	17	12	0	17	0	58	17	10	49	17	19	33	17	23	29	17	21	11	17	13	17		17	2	1	17	9	33	17	19	15	17	23	28
18	20	36	18	11	39	18	0	34	18	11	10	18	19	46	18	23	30	18	21	1	18	12	58		18	1	38	18	9	55	18	19	29	18	23	30
19	20	24	19	11	18	19	0	10	19	11	31	19	19	59	19	23	31	19	20	50	19	12	38		19	1	15	19	10	17	19	19	43	19	23	31
20	20	11	20	10	56	20	0	13	20	11	51	20	20	11	20	23	31	20	20	39	20	12	18		20	0	51	20	10	39	20	19	57	20	23	31
21	19	57	21	10	35	21	0	37	21	12	13	21	20	23	21	23	31	21	20	27	21	11	58		21	0	27	21	11	0	21	20	10	21	23	31
22	19	44	22	10	13	22	1	1	22	12	31	22	20	35	22	23	31	22	20	15	22	11	37		22	0	4	22	11	21	22	20	23	22	23	31
23	19	30	23	9	51	23	1	25	23	12	51	23	20	47	23	23	30	23	20	2	23	11	17		23	0	20	23	11	42	23	20	36	23	23	30
24	19	15	24	9	29	24	1	49	24	13	11	24	20	58	24	23	29	24	19	50	24	10	56		24	0	43	24	12	3	24	20	48	24	23	29
25	19	1	25	9	6	25	1	12	25	13	31	25	21	8	25	23	28	25	19	37	25	10	36		25	1	6	25	12	24	25	20	59	25	23	27
26	18	45	26	8	44	26	2	36	26	13	50	26	21	19	26	23	26	26	19	24	26	10	15		26	1	30	26	12	45	26	21	11	26	23	25
27	18	30	27	8	21	27	3	0	27	14	9	27	21	29	27	23	23	27	19	10	27	9	53		27	1	54	27	13	6	27	21	22	27	23	22
28	18	14	28	7	59	28	3	23	28	14	28	28	21	39	28	23	20	28	18	56	28	9	32		28	2	17	28	13	26	28	21	32	28	23	9
29	17	58	29	7	36	29	3	46	29	14	56	29	21	48	29	23	17	29	18	42	29	9	11		29	2	41	29	13	46	29	21	42	29	23	15
30	17	42				30	4	9	30	15	4	30	21	56	30	23	13	30	18	27	30	8	49		30	3	4	30	14	6	30	21	52	30	23	11
31	17	25				31	4	32				31	22	5			31	18	12	31	8	27						31	14	25				31	23	6

TABLE,

Of the Declination of the Sunne.

New Stile,

Vpon the first yeare, after the LEAP-YEARE.

Ianuarius.			Februari.			Martius.			Aprilis.			Majus.			Junius.			Julius.			Augustus.			Septemb.			October			Novemb.			Decemb.		
da.	de.	mi.	da.	de.	mi.	da.	de	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.
1	23	1	1	16	55	1	7	18	1	4	49	1	15	18	1	22	11	1	23	11	1	18	0	1	8	21	1	3	21	1	14	39	1	21	59
2	22	55	2	16	73	2	6	55	2	5	12	2	15	36	2	22	19	2	23	6	2	17	45	2	7	49	2	3	44	2	14	58	2	22	8
3	22	50	3	16	19	3	6	32	3	5	35	3	15	53	3	22	26	3	23	1	3	17	29	3	7	27	3	4	8	3	15	17	3	22	16
4	22	42	4	16	1	4	6	9	4	5	58	4	16	11	4	22	33	4	22	56	4	17	13	4	7	5	4	4	31	4	15	36	4	22	24
5	22	35	5	15	43	5	5	46	5	6	21	5	16	28	5	22	40	5	22	51	5	16	57	5	6	43	5	4	54	5	15	54	5	22	32
6	22	28	6	15	24	6	5	23	6	6	43	6	16	44	6	22	46	6	22	45	6	16	41	6	6	20	6	5	18	6	16	12	6	22	39
7	22	20	7	15	5	7	4	59	7	7	5	7	17	1	7	22	52	7	22	18	7	16	23	7	5	58	7	5	41	7	16	30	7	22	46
8	22	12	8	14	46	8	4	36	8	7	28	8	17	17	8	22	57	8	22	31	8	16	0	8	5	35	8	6	4	8	16	48	8	22	52
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19	20	13	19	11	1	19	0	16	19	11	25	19	19	57	19	23	31	19	20	51	19	12	43	19	1	21	19	10	11	19	19	41	19	23	31
20	20	1	20	10	40	Eq. 20	0	24	20	11	46	20	20	9	20	23	31	20	20	40	20	12	23	20	0	57	20	10	33	20	19	54	20	23	31
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22	19	33	22	9	56	22	0	55	22	12	27	22	20	33	22	23	31	22	20	17	22	11	43	22	0	10	22	11	16	22	20	21	22	23	17
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25	18	49	25	8	49	25	2	6	25	13	25	25	21	6	25	23	28	25	19	39	25	10	41	25	1	0	25	12	19	25	20	57	25	23	28
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31	17	12				31	4	26				31	22	4				31	18	31	31	8	33				31	14	20				31	23	7

TABLE,

Of the Declination of the Sunne.

New Stile,

Vpon the Second yeare, after the LEAP-YEARE.

Ianuarius.			Februari.			Martius.			Aprilis.			Majus.			Junius.			Julius.			Augustus.			Septem.			October.			Novem.			Decemb.		
da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	gr.	mi.	da.	de.	mi.	da.	de.	mi.
1	23	3	1	16	59	1	7	24	1	4	43	1	15	13	1	22	10	1	23	11	1	18	4	1	8	17	1	3	16	1	14	35	1	21	57
2	22	57	2	16	42	2	7	1	2	5	7	2	15	31	2	22	17	2	23	7	2	17	49	2	7	55	2	3	39	2	14	54	2	22	6
3	22	51	3	16	24	3	6	38	3	5	30	3	15	49	3	22	24	3	23	3	3	17	33	3	7	33	3	4	2	3	15	13	3	22	14
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7	22	23	7	15	10	7	5	5	7	7	6	7	16	57	7	22	61	7	22	40	7	16	27	7	6	3	7	5	35	7	16	26	7	22	44
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18	20	29	18	11	28	18	0	45	18	10	59	18	19	40	18	23	29	18	21	5	18	13	7	18	1	50	18	9	44	18	19	23	18	23	29
19	20	16	19	11	6	19	0	22	19	11	20	19	19	53	19	23	31	19	20	54	19	12	48	Eq. 19	1	26	19	10	16	19	19	37	19	23	30
20	20	3	20	10	45	Eq. 20	0	2	20	11	41	20	20	6	20	23	31	20	20	43	20	12	28	20	1	3	20	10	27	20	19	51	20	23	31
21	19	50	21	10	23	21	0	26	21	12	3	21	20	18	21	23	31	21	20	32	21	12	8	21	0	39	21	10	49	21	20	4	21	23	31
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31	17	16				31	4	20				31	22	2				31	18	19	31	8	39				31	14	15				31	23	9

TABLE,

Of the Declination of the Sunne.

New Stile,

Vpon the third yeare, after the LEAP-YEARE.

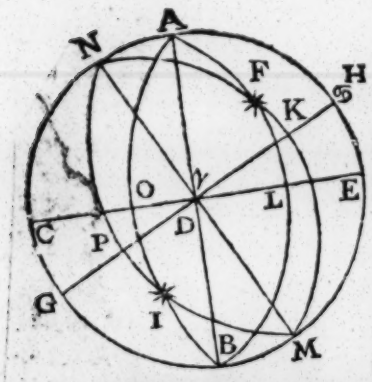
Ianuarius.			Februari.			Martius.			Aprilis.			Majus.			Iunius.			Iulius.			Augustus.			Septemb.			October.			Novemb.			Decemb.		
da.	de.	mi.	da.	de.	mi.	da.	de	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.
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31	17	12				31	4	14				31	22	0				31	18	22	31	8	44				31	14	11				31	23	10

Eq. Eq.

Of the length and breadth of the fixed Starres.

THe ſtarres of the eighteſt heaven are called the fixed Starres, becauſe they are (not alike the Planetes, without moving (alwayes faſt and fixe in one faſhion & diſtance from each-other, and together through it Primum Mobile are carried one with another round about, and are accounted after their length and broadneſſe, her length is a part of the Ecliptica, gathered betwixt two half Circles, going both out of the Poles of the Ecliptica, the one through the Equinoctium of the Spring or beginning Arietis, the other through the Starres ſelfe. Their broadneſſe is a Bow of ſuch an halfe Circle, betwixt the Equinoctiall line and the Starre. The ſame is of two ſorts, northerly and ſoutherly, the northerly ſtand northwards from the Ecliptica, and the ſoutherly, ſouthward from thence.

Explication.



Let C D be Cancer, the Ecliptica linie N the norther, M the ſouther Poles of the ſame, F a certaine Starre. Let be drawn out of the foreſaid Poles two half Circles, the one N D M through the Equinoctium of the Spring on D. The other through the Starre F, cutting the Ecliptica in K, the part of the Ecliptica DK, is the length of ſuch an Starre, and the bow of a part of the ſame half Circles K E, his broadneſſe to the north, becauſe he ſtandeth by north the Ecliptica.

Of the right Aſcention and Declination of the fixed Starres.

The right Aſcenſion of the Starres is a part of the Equinoctials, ſtanding betwixt 2 halfe Circles, going both out of the Poles of the World, the one through the Equinoctium of the Spring, the other through the ſtarres. Their Declination, a Bow of ſuch a halfe Circle betwixt the Equinoctiall, and the ſame Starres, which are alſo two ſeverall, northerly, which ſtands by north the Line, and ſoutherly which ſtands by ſouth.

Explication.

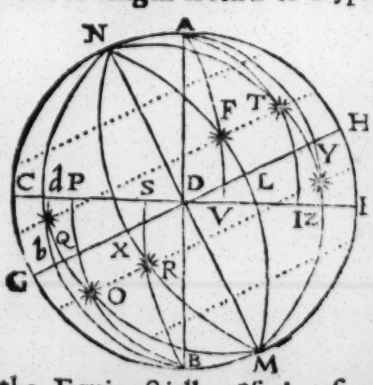
In the former figure is C D E the Equinoctial line, A the norther, and B the ſouther Pole of the World, F a certaine ſtarre; draw out of the foreſayd Poles two halfe Circles, the one A D B through the Equinoctium or beginning of Arietis, the other through F the ſtarre, the ſame cuts the Equinoctiall in L. The part of the Equinoctials L D, is the right Aſcenſion of ſuch a Starre, and the Bow of the part of the ſame Circles, L F, his Declination to the north, or O I, of the Starre I, to the ſouth.

Of the changing from the Declination of the fixed Starres.

SO as the Stearnerd-heaven, upon our eye-ſight every, 24 houres is turned round, through it primum mobile, upon the Aſſe points of the Poles of the World from the eaſt to the weſt, alſo is the ſame in 25400 years once turned round upon the Poles of the Ecliptica, to the contrary from the weſt to the eaſt, like as the Sunne once yearly. Through which dot change the length of the Starres every 100 years 1 degree, 25 minutes, or every 20 yeares 17 minutes, but their broadneſſe, that is the diſtance of the Ecliptica, is unchange-able, alwayes the ſame. Through the foreſayd changing of the length, changeth in time alſo the Declination, of the one more and ſooner then from the other. The northſtarre, and ſome other more, doe change every three yeares about one minute in Declination, and ſome can not change in 50 yeares one minute. Some grow leſſe, ſome more. Some having northerly Declination, become ſoutherly, ſome having ſoutherly Declination, become to the contrary northerly.

Explication.

C D E, being the Equinoctiall, A the norther and B the ſouther Pole of the World, G D A the Ecliptica line, N M the Poles of the ſame, G the beginning of Capricorni, D Arietis, and H the end of Gemini, or the beginning of Cancer. Leave (as before) the Starre on F, his length is in the Ecliptica on L, his broadneſſe there by north L E, his northerly Declination is then V F. If the foreſaid ſtarre after ſome yeares, runneth in length from F to T; parallell with D H his broadnes remaines K T, even on the former F L, but his Declination I T, is more then V E the firſt, becauſe the parallell with D H is more turned from the Equinoctiall line. The ſtarre on O, whoſe length his in the Ecliptica on Q, and his broadnes Q O, hath ſoutherly Declination P O, but running in length from O in R, parallell with Q X, broadnes is X R, even on Q O, but his ſoutherly Declination R S, is leſſer then O P, becauſe that he parallell with G D, is come nearer to the Equinoctiall. If the ſame ſtar comes in length to runne unto Y, his Declination ſhall be Y Z, by N the line. That is

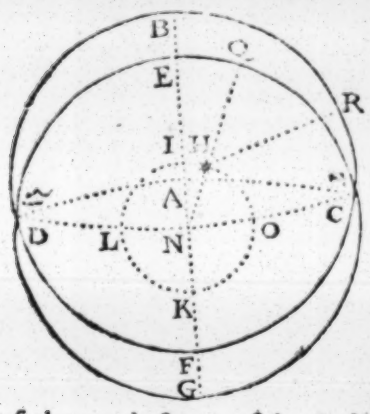


from

from the first 6 signes, Capricornus, Acquarius, Pisces, Aries, Taurus, Gemini. Upon the same manner to the contrary in the other 6 signes, Cancer, Leo, Virgo, Libra, Scorpius, and Sagitarius, as followeth. In the same figure being H the beginning Cancri, D Libra, and G the end Sagitary. If a Starre on T, having northerly Declination TI, runneth in length till in F, his declination FV, is lesser then TI, because he is come nearer to the Equinoctiall, but if the same in length over runneth till on B, his declination (which was first N.) shal then be southerly from B in D.

Through the foresayd moving of the eightest haven changeth also the declination of the North starre, which grouwes now every yeare more, that is, he turneth how longer how more from the Equinoctiall, and comes nearer to the Pole, which shall endure unto the yeare of our Lord 2091. then shal he be upon the neareste unto the Pole, and no more then 26 minutes and an halfe distant from thence, and after that time turne by little and litle againe from thence so that he after 12900 yeares shall stand off from the pole 47 degrees, 56 minutes. How this can be, may be plainly understood out of this following Explication.

A being the northerpole of the World, in the midst of the Equinoctiall B D F C: N the Pole of the Ecliptica, in the midst of the Ecliptica E D G C: H the north-starre. his broadnesse of the Ecliptica is Q H, 66 degrees, 2 minutes, and his distance from the Pole of the Sodiacx N H, 23 degrees, 58 minutes, these be alwaies the selfe same, like as the Broadnesse and distance of all the fixed starres of the Sodiacx-Pole as is said before, his length of the Equinoctium of the Spring, or beginning Arietis was before the yeare 1625 C Q 83 degrees 24 minutes.



Let out of N, the Pole of the Ecliptica, an Circle be written, as I L K O H, whose halfe Diametre be N H, 23 degrees, 58 minutes, even on the distance of the north-starre of the Sodiacx-pole, there within is besieged the north-pole of the World A, as being somewhat lesse distant from the Sodiack pole then the north starre upon such an Circle doth the norther-starre his turning round about the Sodiax-Pole, so as al fixed starres, 25400 yeares) his distance from the Pole of the World is before the yeare 1645 A H, 2 degrees, 35 minutes, and shal be come in the yeare of our Lord 2091 through the foresayd moving, from H in I, upon the neareste on A, the Pole of the World, and stand from thence no more then 26 minutes and an half. Going forth from I, alongst L, till in K, he shal be distant from the pole of the World A K, 47 deg. 56 min.

Because the starres, doe not alwayes hold one declination, have we, at service of all mariners (or Sea-fearing-men) preapared these two following Tables: The first sheweth her declination for the yeare 1645 the second for the yeare 1655. Besides the declination, there is put unto it the Complement of the Declination, that is, how farre the same stands from the Pole.

Table of the declination of the principall fixed starres, together her distance from the Pole, upon the years of 1645 and 1655.

These following (standing all by south the Equinoctiall Line) have southerly Declination.

From the north-starre Alrucuba, beginneth the northerly Declinatium.

	Anno 1645. Southerly declination.		The dist. from the Pole.		Anno. 1655. Southerly declination.		The dist. from the Pole.	
	gr.	mi	gr.	mi.	gr.	mi.	gr.	mi.
The northermost in the whales tayle.	10	46	79	14	10	43	79	17
The southermost in the whales tayle.	19	57	70	3	19	54	70	6
Regel, the left foot of Orion.	8	39	81	21	8	38	81	22
The first of the three in the Girdle of Orion, or the 3 Kings.	0	36	89	24	0	36	89	24
The second in the girdle, or 3 Kings.	1	27	88	33	1	27	88	33
The third.	2	10	87	50	2	10	87	50
The great Dogge, Syrius.	16	13	73	47	16	13	73	47
The hart of the watersnake.	7	8	82	52	7	10	82	50
Spica Virginis, or the corneare.	9	15	80	45	9	18	80	42
The south Balance.	14	30	75	30	14	33	75	27
The north Balance.	8	1	81	59	8	4	81	56
The northermost and first is the left-hand of the snakebearer Ophiuchus.	2	46	87	14	2	48	88	12
The left knee of Ophiuchus.	9	46	80	14	9	48	80	12
The right knee of the snakeberer.	15	12	74	48	15	13	74	47
Antares the hart of the Scorpion.	25	33	74	27	25	35	74	25
The northermost of the two in the hornes of Capricorne.	13	33	76	27	13	32	76	28
The southe most of the two The former or most westerly off the 2 starres in the tayle of Capricorne.	15	50	74	10	15	49	74	11
The second most easterly.	18	10	71	50	18	8	71	52
The left shoulder of Acquarius.	17	39	72	21	17	37	72	23
The right shoulder of Aquarius.	7	4	82	56	7	2	82	58
The uttermost of Aquarius named Famahand.	2	0	88	0	1	57	88	3
	31	25	58	35	31	22	58	38

	Anno 1645. Northerly Declination		Distance from the N. pool.		Anno. 1655 Northerly Declination.		Distance from the N. Pool	
	gr.	mi.	gr.	mi	gr.	mi.	gr.	mi.
Alrucuba the north starre.	87	25	2	35	87	28	2	32
The middlemost or brightest of the Watchmen.	75	40	14	20	75	37	14	23
The brest of Cassiopea.	54	37	35	23	54	40	35	20
The hippe of Cassiopeia.	58	49	31	11	58	52	31	8
The knee of Cassiopeia.	58	22	31	38	58	25	31	35
The brightest in the cleare of Cassio.	57	13	32	47	57	17	32	43
The head of Andromeda.	27	9	62	51	27	12	62	48
The Girdle of Andromeda.	33	47	56	13	33	50	56	10
The most southerly foot of Androm.	40	36	49	24	40	39	49	21
The brightest in the head of the Ram.	21	46	68	14	21	49	68	11
The brightest in the mouth off the Whale.	2	40	87	20	2	42	87	18
The brightest in the head of Medusa.	39	33	50	27	39	35	50	25
The brightest in the side of Perseus.	48	31	41	29	28	33	41	27
Aldebaran the south eye of the Bul.	15	48	74	12	15	50	74	10
The North-horn of the Bull.	28	16	61	44	28	17	61	43
The south-horne of the Bull.	20	54	69	6	20	54	69	6
The left shoulder off the Gyant Orion.	5	59	84	1	6	0	84	0
The right shoulder of Orion.	7	18	82	42	7	18	82	42
Hircus or Capella in the left shoulder of the carter Erichtonius.	45	35	44	25	45	36	44	26
The right shoulder of Erichtonius.	44	52	45	8	44	52	45	8
The brightest in the foot of the twinnes	16	40	73	20	16	40	73	20
The head of the northermost twinne Castor.	32	36	57	24	32	35	57	25
The head of the southermost twinne Pallux.	28	50	61	10	28	49	61	11
Procyon the little Dogge.	6	7	83	53	6	6	83	54
Regulus, Basiliscus the hart of the Lion	13	40	76	20	13	37	76	23
The middlemest and cleareste in the neck of the Lyon.	21	37	68	23	21	34	68	26
The brightest in the back of the Lyon	22	28	67	32	22	24	67	36
The taile of the Lyon.	16	33	73	27	16	30	73	30
The northermost hinderwheele of the great Wagon.	63	40	26	20	63	37	26	23
The southermost hinderwheele of the great Wagon.	58	17	31	43	58	14	31	46
The northermost forewheele off the Wagon.	59	0	31	0	58	57	31	3
The souther forewheele of the Wagon	55	41	34	19	55	37	34	22
The neereste Horse to the Wagon.	57	56	32	4	57	53	32	7
The midlemost Horse.	56	49	33	11	56	46	33	14
The southermost Horse.	51	8	38	52	51	5	38	55
Vindemiatrix the north wing of Virgo.	12	54	77	6	12	51	77	9
The Girdle of the Virgin.	5	22	84	38	5	19	84	41
The left shoulder of Bootes.	39	50	50	10	39	47	50	13
The bright star betwixt the hightes of Bootes Arcturus.	21	5	68	55	21	2	68	58
The brightest in the north Crowne.	27	57	62	3	27	55	62	5
The brightest in the neck off the Serpent Opiuchus.	7	37	82	23	7	35	82	25
The head of Hercules,	14	51	75	9	14	50	75	10
The head of the Serpentbearer.	12	52	77	8	12	51	77	9
The brightest in the Dragons head.	51	37	38	23	51	37	38	23
Lyra.	38	30	51	30	38	30	51	30
The taile of the Eagle.	13	24	76	36	13	25	76	35
Vultur the middlemost and brightest in the Eagle.	8	0	82	0	8	1	81	59
The brest of the Swanne.	39	9	50	51	39	11	50	49
The taile of the Swanne.	44	3	45	57	44	5	45	55
The Girdle of Cephus.	69	1	20	59	69	3	20	57
That in the mouth of Pegasus.	8	16	81	44	8	18	81	42
Sheat the brigtest in the legge of Pegasus	26	10	73	50	26	13	73	47
Marcab the foot of Pegasus.	13	19	76	41	13	21	76	39
The uttermost in the wing of Pegasus.	13	13	76	47	13	16	76	44

By this table you may finde the declination of any of these Starres, in the yeares betweene provided that you proportion the difference of the declination to the difference of the time.

I. Example.

I desire to know the Declination of the southermost fore-wheele of the wagon for the year 1650. I find in the table of the yeare 1645. 55 degrees, 41 minutes, and for the yeare 1655. 55 degrees, 37 minutes, the number proportioned as the yeares, I find 55 degrees, 41 minutes, lessening declinated.

II. Example.

I desire to know the declination of *Aldebaran*, the eye of the Bull in the yeare 1650. I find in the table for the yeare 1645. 15 degrees, 48 minutes, for the yeare 1655. 15 deg., 50 min., the number proportioned as the yeares, I finde 15 degr., 49 minut., increasing declination.

Instruction how men shall easily know the fixed starres, upon what time every one of the same comes on the south.

HOw necessary and profitable it is for a Sea-faring man to have knowledge of the fixed starres, and how to use the same, especially in strange voyages and farre Sailings, that is well knowne by all expert and understanding Pilots; therefore, because we have in the former head-point described the declination of the fixed starres and their distance from the Pole, we will shew here a way and certaine Instruction for to know the same easily, and that it all time perfectly may be known when each of the same comes in the south or upon the highest, and when they are fit for to be used. First, must be knowne, that the Sunne-way in the heaven stands unmoveable with the fixed starres, which with the same once every day turnes round, from the east to the west, without changing; but that the Sunne doth against these foresayd yearly turning, from west to the east, through which he, in his dayly going round, doth decline so much, that he in a yeare goeth once lesse round then the fixed starres, and that the fixed starres in a yeare doe turne once more then the Sunne, so that every day the same doe come 4 minutes sooner on the south, that is every weeke about an halfe houre, and every moneth 2 houres. For to understand this more plainly, we will declare that with an Example, with the starre which is called Syrius, or the great Dogge, which followeth alwayes a little after the Gyant Orion, and his Girdle, which men doe call the three Kings, shewth a little above the great Dogge, it is the greatest and cleerest of al the fixed starres, and also most knowne of al Sea-fearing men, his declination is by south the Line 16 degrees and 13 minutes, the same comes in the south the 24 of January, at ten a clocke in the evening. The 23 of February at 8 a clocke in the evening. The 28 of march at 6 a clocke in the evening. The 30 of April at 4 a clock in the evening. The 30 of may, in the after-noone at 2 a clocke. The 28 of June at noone about 12 a clocke, together with the Sunne. The 28 of July, in the fore-noone at 10 a clocke. The 29 of August, in the fore-noone at 8 a clocke. The first of October, in the morning at 6 a clocke. The 20 of November in the morning at 4 a clocke. The 1 of December at 2 a clock in the morning. The 28 of December, in the night, at 12 a clocke.

Out of which every one can easily reckon upon what houre and time these foresayd starre upon al other dayes of the yeares comes in the south, as well by day, when a men can not see him, as by night, when a men can see him. If you also desire to know that of al other fixed starres upon al the dayes of the yeare: then you must first seeke out of that, which is before sayd, upon what houre of your minded day the great Dogge comes on the south, & afterwards out of the following description of the starres how many times such an starre, as you desire, comes after or before the great Dogge on the south, then you shall finde the just and perfect time which you desire.

The counterfaiting of the fixed starres, and upon what time every one of the same comes on the south.

The Twinnes.

THe figure Gemini (in English the Twinnes) is situated direct north, from the great Dogge, or Canis major in the same manner as it is here described, the north head thereof commeth 40 minutes, after the Dogge, into the south, his declination is two and thirtie degrees, and 37 minutes from the Line northward.



The south and loweſt head thereof commeth 54 miuutes after the great Dogge into the south; and hath his declination towards the north, 28 degrees, 51 minutes.

The cleerest in the foot commeth a quarter of an houre before the great Dogge into the South his, declination is 16 degrees, and 40 minutes towards the north.

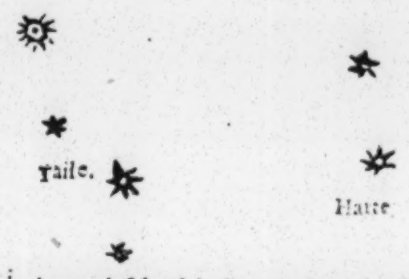
Canis minor or the little Dogge, called Canicula, Procyon.

This little Dogge Canicula, hath 3 starres, in this forme, the cleerest of them commeth 50 min. after the great Dogge into the south: his declination is six degrees, 8 minutes in the north side of the Linie.



The Watersnake. Hydra.

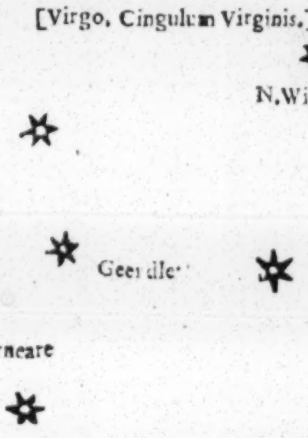
The Harte or the cleerest in the VVatersnake commeth after Syrius or the great Dogge two hours, 40 minutes to the sout hhis declination is in the south side of the Line, 7 degrees and 5 minutes and shew it selfe with such little stars as are here noted, whereby he is easily knowne,



The Lyon.

The Lyon hath foure beautifull stars, fit for use, and sheweth it self with other, as is here set forth, the first and foremost of them is called Regulus or Basiliscus otherwise the hart of the Lion which cometh 3 hours & 30 min., after the great Dogge into the south, his declination 13 graden 40 minut. in the north side of the line; the second called the necke of the Lyon 3 houres 30 minutes, after the great Dogge into the south; and hath his declination of the line 21 gr. 4 minut. the back of the Lyon comes into the south, 74 minutes before the great Dogge; his declination is in the north side of the line 22 graden 33 minutes, the taile of the Lyon comes 5 houres after the great Dogge into the south; his declination 16 graden 36 minutes, in the north side of the line. [Benda Leonis.]

[Virgo, Cingulum Virginis.]



Virgo or the maide.

After followeth Virgo, whereof the principall and cleerest shews this shape, as they are here portraied; the Girdle off the Virgin comes into the south, five hours 12 minutes after the great Dogge, here declination is five graden 25 minutes in the north side off the Line.

That which is an wing called Vindemiatrix comes into the south, 9 hours, 16 min. after the great Dogge, here declination is in the northside of the Line 13 degr. 57 min.

Spica Virginis.

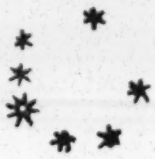
The eare of corne or Spica Virginis commeth 6 houres and 30 minut. after the great Dogge into the south her declination is 9 gr. 12 minutes in the south side of the Line.

Bootes the Crowne. Arcturus.

Seven houres 30 minutes after the star called Syrius, the cleerest star of Bootes comes into the south and standeth between his thighes, in this forme, with some other stars, and is called Arcturus, his declination is in the north side of the line 21 degrees 8 minutes.



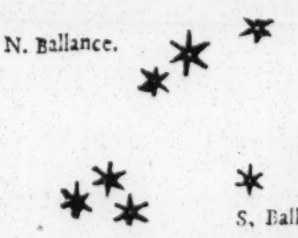
The norther Crowne. Corona. Ariadnæ.



After Bootes followeth the north Crowne, beareing fashon of a circle, as followeth, off the Mariners, it is called the Hospital, and when in cleare whether, they behold some small Stars in it, they call them the sick; the greatest and cleerest off then comes eight houres, 48 minut. after the great Dogge into the south, his declination is in the north side of the Line 27 degrees, 59 minutes.

The Weights Libra.

The ballance or Waights, followe the signe of Virgo, as followeth.



The south Ballance comes eight houres after the great Dogge to the south, its Declination is in the south side off the Line 14 degr. 28 min.

The north Ballance comes 8 houres, 48 minutes after Syrius to the south, the declination thereof is 7 degrees, 58 minutes in the south side of the Line.

The Scorpion, Scorpius.
Cor Scorpius. Antarus.

Then followeth the Scorpion, as this figure sheweth, the hart of Scorpius, Antares communel called, comes 9 houres, 48 minutes, after Syrius in to the south, his declination is 25 degrees 32 minutes in the south side of the Line.



The Snakeberer, and Herculus. Serpentarius.

THe Snakebearer, sheweth him selfe, as it appeareth in this figure, the formost starre, and that which is most toward the north of the two, which stande on the left hand, comes 9 houres 25 minutes after the great Dogge into the south, his declination is 2 degrees 44 minutes south from the Line.



The head of the Snakebearer comes 10 houres 40 minutes after Syrius to the south, his declination 12 degrees, 53 minutes in the north side of the line.

The head of Hercules standeth by the head of Serpentarius, and comes 20 minutes before it into the south, and hath his declination northward 14 degrees, 52 min.

Lyra. Vultur Cadens.



Then followes Lyra, in this manner, the greateſt with two little ones by it, which the mariners call the three caſtles the lighteſt and cleareſt Starre, comes 11 houres, 55 minutes after the great Dogge into the ſouth, the declination thereof is 38 degrees, 28 minutes in the north ſide off the Line.



The Eagle. Vultur volans Aquila Sygnus.



Sheweth himſelf as this figure declareth, the clareſt off theſe, that is to ſay the middlemoſt of the three, comes 13 houres after the great Dogge; or 11 houres, into the ſouth the declination thereof is 7 degrees, 57 minutes, in the north ſide off the Line.

The Swanne.

The Swanne is ſhaped thus: the ſtarre that is the moſt north in the breſt, commeth 13 houres, 40 minutes after or of 10 houres, 20 minut. into the ſouth before the great Dogge, and hath his declination in the north ſide of the Line 39 degrees, 7 minutes. That which ſtands moſt to the ſouth of the two in the breſt, is a new ſtarre, and hath shewed it ſelf firſt in the year 1600, the north wing comes 10 houres, 4 minutes after the Dogge into the ſouth, the northern declination thereof is 44 degrees, 13 minutes.



Cauda Sygni.

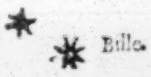




The 5. Weing comes 14 houres after the great Dogge into the ſouth, the declination off it is 32 graden and thirty minutes in the north ſide of the Line. The lighteſt and cleareſt off the Swanne, which is placed in the taile of it, comes 14 houres, after the great Dogge, or 10 houres before into the ſouth, the declination of it is 44 degrees, 1 minute in the north ſide of the Line.







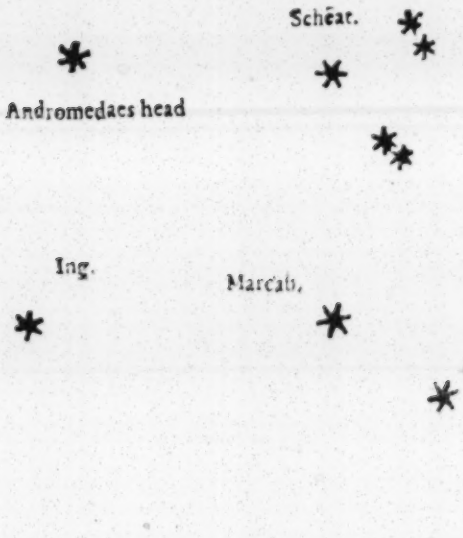
Capricorne.



The moſt ſoutherly and cleareſt off the two lighteſt is the houre off Capricorne, as is here to be ſeen, commeth 13 houres, 30 minutes after the great Dogge into the ſouth.

The Flying Horſe Pegaſus.

The Flying Horſe Pegaſus, we may ſee in the heavens in this proportion, the ſtarre in the mouth comes 14 houres 56 minutes after, or 9 houres, 4 minutes before the great Dogge into the ſouth, his declination is 8 degrees 7 minutes.

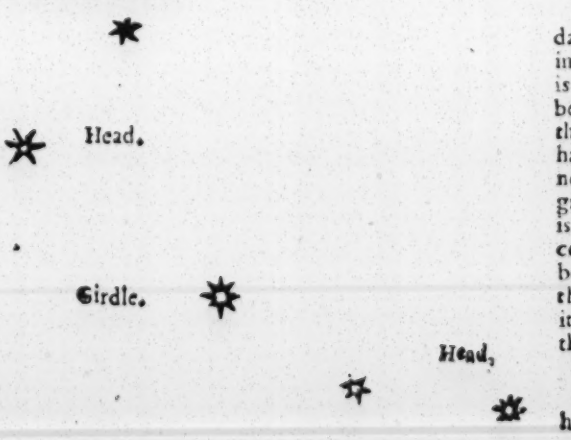


That which ſtandeth on the right hippe or right legge called the Scheat, the ſame coms 16 houres, ſixteen minutes after the great Dogge, or 8 hour 44 minutes before it into the ſouth, the declination of it is 26 degrees, 7 minutes in the north ſide of the Line, at the ſame tyme comes the firſt and foremoſt in to the ſouth; placed in the VVing, which is called Marçab. The declination of it is 13 deg., 16 minutes on the north ſide of the Line.

The laſt and utmoſt in the wing of Pegaſus, comes 6 hour 44 minutes after the great Dogge or 7 houres, 16 minutes, before it into the ſouth; the declination of it is 13 degr. 9 minutes in the north ſide of the Line.

The Head of Andromeda.

The head of Andromeda making with ſome ſtarres of Pegaſus a great quadrangle (whereby it is eaſily knowne) comes after the great Dogge into the ſouth 17 houres, 24 minutes or 6 houres, 33 minutes before it, the declination is 27 degrees, 6 minutes north from the Line.



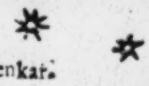
The Image of Andromeda is placed in the Heavens in this ſort: that ſtarre that it is in the Girdle commeth before the great Dogge into the ſouth 5 hours 40 minuts, hath his declination in the north ſide of the Line 33 degrees 43 minutes, that which is in the moſt ſoutherly foot comes 4 hours, 48 minutes before the great Dogge into the ſouth, the declination of it 40 degrees 33 minutes in the north ſide of the Line.

Fomahant.

The Starre named Fomahant is placed a good ſpace in the ſouth ſide of the Flying horſe, in the uttermoſt part of the fludde running from Aquarius, it is a great and cleare Starre, and come 16 houres, 6 minutes after Syrius or 7 houres 44 minutes before it into the ſouth; the declination there is 31 degrees, 28 minutes in the ſouth ſide of the Line.

Cetus or the Whaleſish.

After theſe follows the Whaleſish, it hath two notable Starres in the tayle of it, the more northerly comes before the great Dogge into the ſouth 6 houres 28 minutes, the declination off it is 10 degrees, 50 minutes in the ſouth ſide of the Line, 24 min. after comes the ſouthermoſt into the ſouth, and it is in the ſouth ſide of the 20 degrees line, 1 minute



Menkar.

The cleareſt in the mouth named Menkar, shewes it ſelfe with two other Starres in this order, the declination is in the north ſide of the Line 2 degrees, 37 minutes.

Aries.



In the head of Aries there is a cleare ſtarre appearing with that in the Horne, in form as is here deſcribed, and comes four houres, 43 minutes into the ſouth, before the great Dogge ſtandeth in the north ſide of the Line 21 degrees, three and forty minutes.

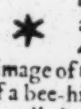
Caput Meduſa.



Somewhat more northerly followeth the head of Meduſa as it is here dechiphered, the cleareſt of theſe comes before the great Dogge into the ſouth 3 houres, 46 min. and is placed in the north ſide of the Line 39 deg. 24 minutes.

Perſeus.

Directly north followes Perſeus a bright Starre in forme thus, and it comes before Syrius into the ſouth, 3 houres, & a half, hath the declination in the north ſide off the Line 48 degrees, 29 minutes.



Then followes the image of the Bul, in whoſe head there are ſome ſtarres in the forme of a bee-hive, lying a ſide the greateſt, brighteſt, and moſt eaſterly ſtarr, called the eye of the Bul, Aldebaran, or Oculus Tauri, comes 2 hours 14 min. before the great Dogge into the ſouth his declination is in the north ſide of the line 15 deg. 46 min.



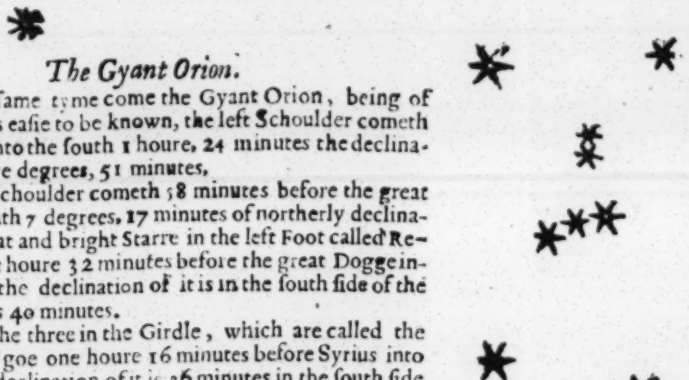


The Cochman, Erichtonius. Auriga.

The figure of Auriga, or the Cochman, shewes himſelfe a little after the Bull in the ſouth, in ſuch ſort as is here decifered, the greateſt & brighteſt off them. called the goat, hircus: or capella, come one houre, 40 minutes before the great Dogge into the ſouth; the declination off it is 45 degrees, foure and thirty minutes in the north ſide of the Line.

The right Schoulder goeth 57 minutes before the great Dogge toward the ſouth; his declination is in the northward 44 degrees, 51 minutes.

Alſo called the north Horne of Taurus, goes one houre, 22 minutes before the great Dogge into the ſouth; his declination is 28 degrees, 15 minutes northward.



The Gyant Orion.

About the ſame tyme come the Gyant Orion, being of this figure, it is eaſie to be known, the left Schoulder cometh befor Sirius into the ſouth 1 houre, 24 minutes the declination of it is five degrees, 51 minutes.

The right Schoulder cometh 58 minutes before the great Dogge, and hath 7 degrees, 17 minutes of northerly declination. The great and bright Starre in the left Foot called Regel, goeth one houre 32 minutes before the great Dogge into the ſouth; the declination of it is in the ſouth ſide of the Line 8 degrees 40 minutes.

The firſt of the three in the Girdle, which are called the three Kinges, goe one houre 16 minutes before Syrius into the ſouth, the declination of it is 36 minutes in the ſouth ſide of the Line.

Foure minutes after commeth the ſecond or middlemoſt into the ſouth; the declination is 1 degree 27 minutes.

Regel.

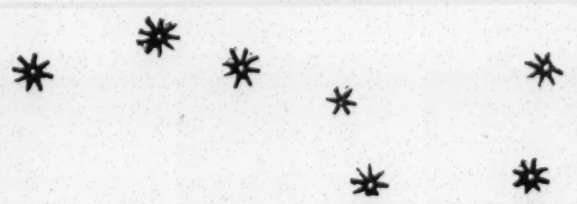
Three Kings.

Nine minutes after the firſt commeth the laſt or third of the 3 Kinges into the ſouth and hath his declination in the ſouth ſide of the Line 2 degr. 10 minutes.

Theſe three Kinges ſtand allwayes and appeare a little above the great Dogge, whereby they are eaſily knowne.

Here doe follow ſome ſtarres which shewe themſelves in the north, and therefore by ſome men are called North-ſtarres.

Vrſamajor.



The Starres of the great Coach or Wagon, very ſervicable and fitte for thoſe that ſayle farre towards the ſouth; they come in the tyme here following ſpecified unto their higheſt, the hinder-wheeles come into the north too their higheſt after Syrius or the great Dogge 4 hour 12 minutes the moſt northern hath his declination from the Equinoctial 63 degr. 33 min. and is diſtant from the Pole 26 degrees 17 minutes; the declination off the ſouthermoſt is 58 degrees, 29 minutes, it is diſtant from the Pole 31 degrees 40 minutes.

The ſouthermoſt off the forewheeles comes into the north to his higheſt right over the Pole 5 houres, 5 minutes after the great Dogge is paſt the ſouth; his declination 55 degrees 45 min. in the north ſide of the Line, and is diſtant from the Pole 34 degr. 15 min.

The moſt northern in the fore wheele followeth 23 minutes after, and then commeth to his higheſt; the declination of it is 59 degrees, 4 minutes and it ſtandeth above the Pole 30 degrees 56 minutes.

The Horſe next to coach commeth to its higheſt in the north, 9 houres, 8 minutes, after the great Dogge is gone through the ſouth; it declineth to the north 57 degrees, 59 minutes, is diſtant from the Pole 32 degrees, 1 minute.

The middlemoſt horſe comes halfe an houre after it to the higheſt; the declination off it is 56 degrees, 52 minutes, therefore it ſtandeth diſtant from the Pole 33 degr. 8 min.

The uttermoſt Horſe of the coach commeth to the higheſt 7 houres, 4 minutes after Syrius is paſt through the ſouth, the declination off it is 51 degrees 11 minutes it is diſtant from the Pole 21 degrees 49 minutes.

The middlemoſt and brighteſt of the waiters declined to the north 75 degrees 43 minutes is diſtant from the Pole 14 degrees 17 minutes.

NOTA

NOTA.

Touching the north ſtarre her declination, and how it is be uſed, with the wachtmen a declinated in the diſcourſe following.

Caput Draconis.

The dragons head is formed as this figure declearеth, the Star moſt Southerly is the cleareſt, and commeth to the higheſt in the north 11 houre, and 5 minutes after that Syrius is paſt the ſouth, the declination 51 degrees 37 minutes in the north ſide of the Line; ſtandeth from the Pole 38 degrees 23 minutes.





Caſſiopea.

The Image of Caſſiopea sheweth it ſelfe beneath the Pole in this proportion, the firſt Star ſtanding in the Chaire, commeth into the north to the higheſt 6 houres 36 minut. before the great Dogge, the declination of it is 57 degrees 9 minutes to the north, and therefore 38 degrees 51 minutes.

Schedir.

Half an houre after followeth the breſt named Schedir, the declination is 54 degrees 33 minut. and thus it ſtandeth from the pole 75 degrees 27 minutes.

Fifteen houres after that followeth the Star that ſtandeth in the Hippe, it declined 58 degrees 45 minutes, ſo that it ſtandeth for the Pole 31 degrees 15 minutes.

Yet 27 minutes later followeth that which is placed in the knee, hath its declination 58 degrees 18 minutes, it is diſtant from the Pole 31 degrees 42 minutes.

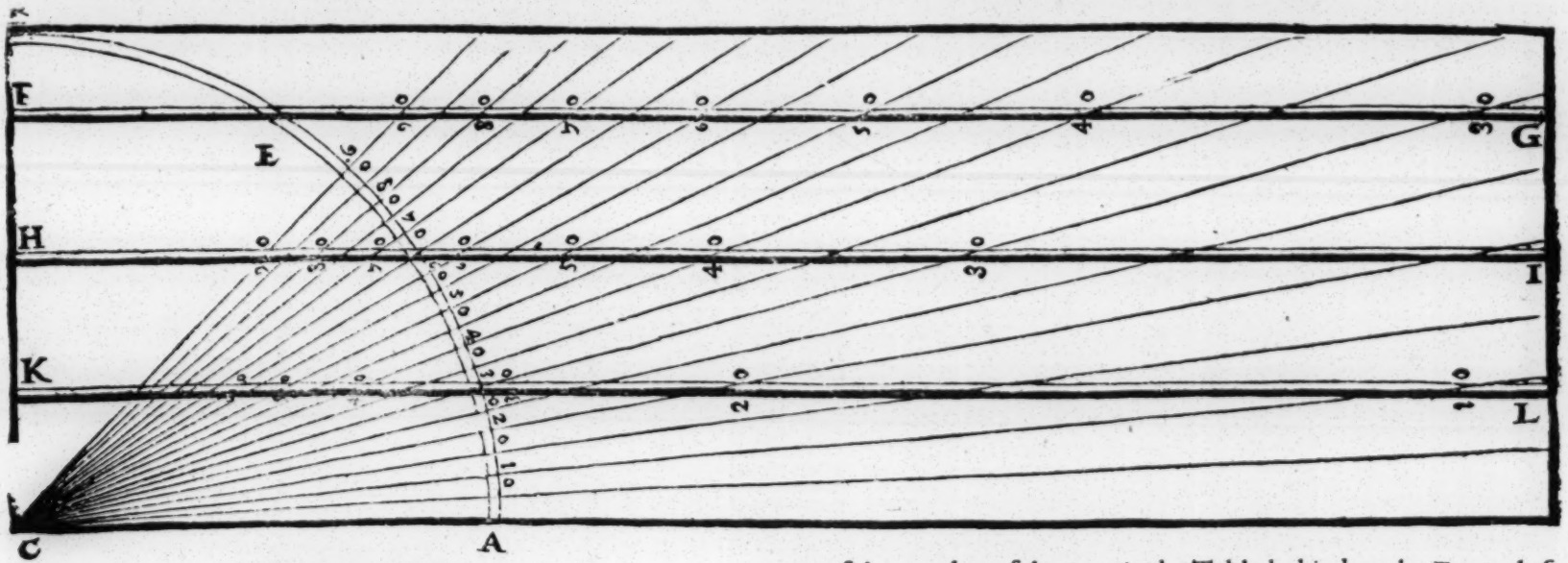
Of the making of the Degree-bowes and Aſtrolabium.

For to meaſure the height of the heavenly lights above the Horizon, the Mathematicians have to that end found out many Inſtruments, two of which are above all other the rareſt for touſe at Ser: viz. the Common degrees bow and the Seaving or Aſtrolabium.

It is not every mans doing to marke and make an Aſtrolabium, not with ſtanding it is neceſſary, that a Pilote, (which muſt uſe the ſame) knowes if they be wel made: For to trey thoſe things take firſt meaſure with a paſſer if the degrees are wel devided. Secondly (hanging the ſame on a litle ſtick or corde) try with a thinne lead-line, if the line going from above downward through the Centrum, hangeth alſo right in the lead, and if the ſame is as well turned as the Wyſer over the one as over the other ſide. Thirdly, when the Wyſer with the poynt ſtandeth in the height, if then both the holes (where the Sunne muſt ſhine through) ſtand under and above juſt even farre over both ſides of a like degrees diſtant from the Zenith or Horizon; having found to be all well, then is the ſame well made.

For to draw out a degree-bow very wel, make an even flatt beard, of good dry wood, 15 and 16 thummes broad, and about 4 foot long, patch that with good ſtrong paper, make along the one ſide a right line, as in the following figure C A D, draw out of the poynt C a right line upon A C, as C B, and out of C the bow, AEB a right quadrant or fourth parth of a Circle, devide the ſame in two parts, the one halfe part thereof, as A E, devide it in 90 parts or degrees, after this manner: Firſt in 3 parts, each of the ſame againe in three, thoſe parts each in 2, and each of the laſt parts in 5, the bow AE ſhal then be devided in 90 parts. Afterwards, take a Linall, lye the one end upon the point C, the other upon each point of the foreſayd devidings, and draw thinne lines out of C, through each of the foreſayd poynts or degrees, in the quadrants, ſo long as they can ſtand upon the board, as theſe following figure plainly ſheweth.

Take afterwards with the paſſer even the halfe length of the Croſſe, after which you make the ſticke, put the ſame from poynt C to B, as is portrayed in F, and from D to G, draw ſuch two poynts with a line unto each-other even in ſuch parts as ſuch a line is cutt and devided through the foreſayd lines, comming out of the Centrum of the quadrant, even alſo muſt your ſticke be marked. If the croſſes be long or ſhort, men follaw the ſame manner, as may be ſeene on the lines HI and KL, which are drawne for Croſſes, whoſe halfe part is ſo long as C H, or C K. So that if the foreſayd quadrant, by want of good handling, is not wel devided, or the lines not wel drawne, the ſtickes, there-after marked, ſhall alſo be wantable. The ſame can be marked with more certainty after alike devided points in manner as followeth: Prepare yourſelfe a ſticke, patched with ſtrong paper (it would be better to be beaten with braſſe) draw there upon a right line, ſo long as your ſtick, take with a ſharp paſſer the half length of the Croſſe, after which you deſire to make your tokening, putt the ſame ſo many times along the foreſayd line as thereupon may ſtand, devide each of theſe lengths of the halfe Croſſe in 10000 alike parts. Afterwards, putt upon the ſticke which you will marke, from the eye-end of, even the halve length of the Croſſe, and make there a ſmal thwart ſtroke of from thence, put for every degree ſo many of the ſame parts as the halfe length of the Croſſe is devided in, as in the Table here under for every degree is marked.



Degree-bows-Table.

de.	parts	de	parts	de	parts.	de	Parts.	de	parts.
1	176	19	4019	37	10057	55	21716	73	56912
2	355	20	4281	38	10503	56	21708	74	61154
3	538	21	4550	39	10965	57	23759	75	65958
4	724	22	4826	40	11445	58	24874	76	71445
5	913	23	5108	41	11943	59	26059	77	77769
6	1106	24	5399	42	12460	60	27321	78	85144
7	1303	25	5697	43	12998	61	28667	79	93854
8	1504	26	6003	44	13558	62	30108	80	104301
9	1708	27	6318	45	14142	63	31653	81	117062
10	1918	28	6643	46	14751	64	33315	82	133007
11	2131	29	6976	47	15386	65	35107	83	153499
12	2349	30	7320	48	16051	66	37046	84	180811
13	2572	31	7675	49	16746	67	39152	85	219038
14	2799	32	8040	50	17475	68	41445	86	276362
15	3032	33	8418	51	18239	69	43955	87	371885
16	3270	34	8807	52	19042	70	46713	88	561810
17	3514	35	9210	53	19887	71	49758	89	1135891
18	3764	36	9626	54	20777	72	53137	90	infinit.

Example.

For the firſt degree you ſhal marke, from that foreſayd thwartſtroke off 176, for the third degree 538, for the 10 degree 1918, of ſuch like parts, and ſo forth all other.

If you cannot devide the halfe length of the croſſe in 10000, devide then the whole croſſe alſo, and take there againſt for every degree halfe ſo many poynts as the Table ſheweth. If you cannot doe that yet, devide the halfe croſſe in 1000, that is an 0 leſſer, leave againſt that the laſt letters of the numbre of the parts in the Table behinde, as by Example for the 15 degree, in ſtead of 3032, take 303, for the 57 degr. 1376. If your Croſſe be ſo little, that you can not devide it more then in 100, in ſuch an occaſion, leave off from the parts in the Table 2 letters behinde, it wil content your deſire.

Of the height of the Poles above the Horizon.

The height of the Pole is alwayes even on the breadth of the Lands

Explication.

By the height of the Polus, that by many is called the height of the Lands, is to be underſtood the upriſing of the Pole above the Horizon, that is, how many degrees there be betwixt the Horizon and the Polus. In the right Spera lyeth the Polus without any height in the Horizon. In the Sphera parallela is the ſame from the Horizon ſett up upon the higheſt 90 degrees. In the Obliqua or ſlooping Sphera is the riſing up diſtant from 1, 10, 20, 40, 50, degrees more or leſſe. Any man being upon the Earth, right under the Equinoctiall line, hath both Poles, the one in the north, the other in the ſouth on the Horizon, without any upriſing, he ſtandeth then alſo right under the mid-line of the Earth, without any breadth. If he turnes off from the middle-line to the north, or ſouth, the one Polus ſhall riſe up out of the Horizon, and the other goeth under, turnes he from the midle-line of the Earth 10, 20, or more degrees in breath to the north, the norther Pole ſhall alſo riſe up 10, 20, or more degrees, the ſouther Pole to the contrary, goeth ſo much down under the Horizon, and the Equinoctiall line turnes even ſo much ſouthward from the Zenith, the contrary is when men turnes off from the

the midle-line to the ſouth. This ſheweth al plainly by theſe following figures.

Example.

Bring both the Poles on the Horizon, without any up-riſing, the Equinoctial line comes then right on the Zenith, and the little man ſhall ſtand upon the Globe of the Earth, right upon the midle-line of the Earth, without any breath. If you doe move the litle man upon the Globe of the Earth from the midle-line to the N. 10 degr. the Equinoctial turneth then 10 degr. ſouthward from the Zenith, the norther Polus riſeth 10 degr. above the Horizon, & the S. pol goeth downe 10 degrees thereunder.

From the height of the Equinoctiall.

The full-filling of the height of the Equinoctial is alwayes on the Poles height and broadth of the Lands.

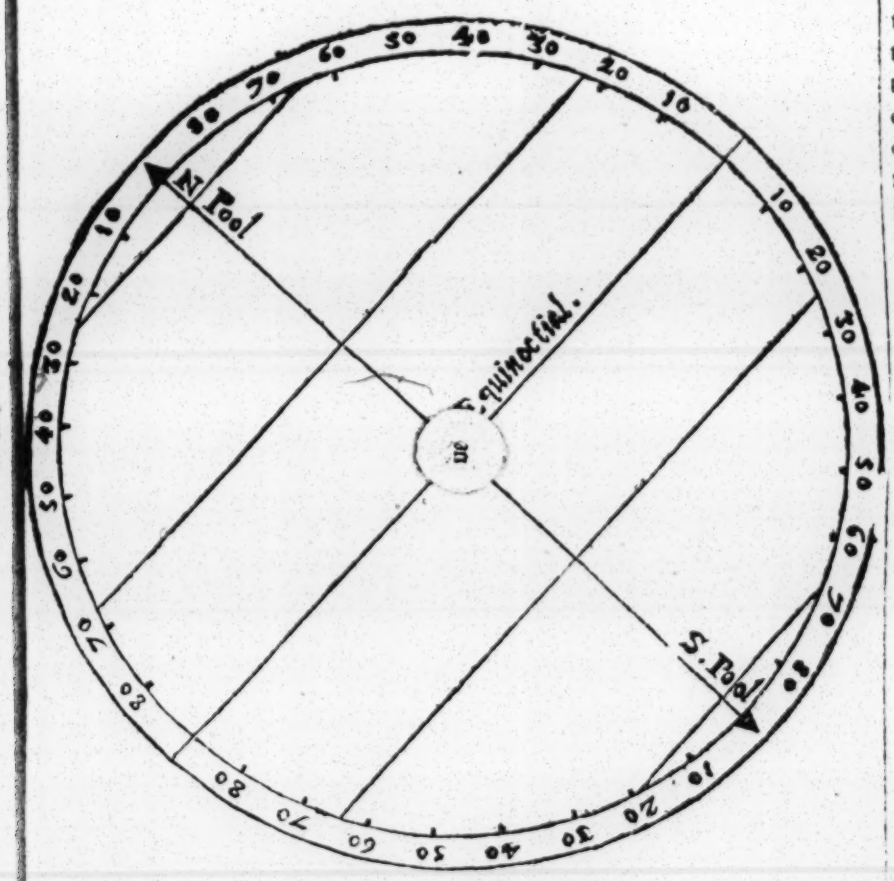
Explication.

Out of the former is ſheweth, that ſo much one of both Poles of the Horizon riſeth the Equinoctiall-line turneth ſo much off from the Zenith to the Horizon. The ſpace betwixt the Equinoctiall and the Zenith, (that is the fulfilling of the height of the Equinoctial into 90) is evē to the contrary on the height of the Polus the ſpace betwixt the Zenith & the Polus (that is the fulling of the Poles heigt unto 90) is alſo alwayes even on the Equinoctial. Out of which followeth: If a man knowes upon any place of the Earth, the riſing or height of the Pole above the Horizon, or the height of the Equinoctiall, & ſo following the fullfilling of the height: he takes there alſo the breath of ſuch a place, that is, how far men is from the midle-line upon the Earth, being to the N. or to the S.

Becauſe the Poles and Equinoctiall-line are viſible, & therefore it is not poſſible to meaſure their height by her ſelfe: men muſt through other things, that he can ſee, come to know-ledge, to wit, through the height of the Sun & of the Starres. Before we goe forth, we wil deſcribe the making & uſing of the ſome Inſtruments which of neceſſity belong thereunto.

Explitation.

The Horizon may be marked upon two manner: to wit, the true and Seeingly Horizon. The true Horizon goeth right water-paſſe alwayes from our eye-ſight, or through the Centrum of the Sphera, deviding



the ſame in two even alike parts, is all over from the Zenith diſtant 90 degrees, the right fourth part of an Circle.

The Seeingly is the uttermoſt of the part of the Earth or waters, which we can ſee with our eyes, and ſtretcheth not further from us then 3 or 4 dutch miles. When our eye is next unto the flat of the waters, the true and Seeingly Horizon are then one without difference, but our eye being in the height from thence, the eye ſight falleth (over the roundneſſe of the Earth) all over lower then waterpaſſe, & therfore is the Seeingly Horizon lower thē the true.

Example.

The Eye-ſight being in the height from the Flatneſſe of the waters 14 feet in the firſt columne, there beſides ſtand 4 minutes, ſo much is the Seeingly Horizon lower then the True, the Eye-ſight being 140 feet in the height, then it is the Seeingly Horizon 13 minutes lower then the True.

The eye being high above the water.	The ſeeingly Horizon is lower then the true.
footes.	minutes.
2	1
4	2
8	3
14	4
20	5
27	6
37	7
39	8
53	9
67	10
82	11
100	12
140	13
163	14
186	15

Of the Meridiaens.

The Meridian is a great Circle, going through both the Poles of the World, through the Zenith, over both ſides, Croſſewiſe through the Equinoctial, and right in the ſouth and north through the Horizon.

Explication.

The Meridian or middayes-Circle hath his name from *Meridies*, that is midday, becauſe that the Sunne comming in the ſouth on this Circle, makes midday. All heaverly Lights going up, and comming on this Circle, are ſet upon the higheſt of the Horizon, going there through, begin again to fall ſoftly downe. If a man doth travel or ſayle right northward or ſouthward, he ſtayes alwayes under one and the ſame Meridian, but if a man turnes eaſtward or weſtward, he gets commonly alwayes another Meridian.

Of the portraiture of the Earth after the length and breadth.

The places upon the Earth are devided and counted after the length and breadth. The length of ſome places is a part of the Equinoctiall Line, (or ſome other parrallel) ſet forth betwixt two Meridians, where of the one goeth through the beginning of the length (over the Canaries Ilandt or Inſule Acores) and the other through the place it ſelfe.

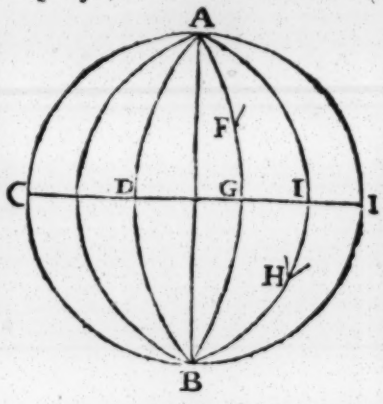
The breadth is a part of the Meridian betwixt the Equinoctiall line and the place, the ſame is devided in two parts, northerly & ſoutherly.

Explication.

Upon the Earth (by Example of the heavenly Sphera) are alſo remembred two Poles, with one midle-line, to wit, two poynts upon the Earth, right under the Poles of the World, common with the Aſſe of the World, and a line in the midſt betwixt the ſame two poynts, right under the Equinoctial Line of the heavens. Along this middle-line men doth count the length of the lands from W. to E. beginning, on Meridian or S. and north line, going over the Pike of Teneriffe (one of the Canaries Iland) till unto 360 degrees. The breadth men doe count from the midle-line northward and ſouthward after both Poles, til 90 degr. This may be underſtood more plainly through theſe 2 following Examples.

I. Example.

Being in theſe following figure of the Earth A the norther, B the ſouther Pole, CDE the midle line, ADB the Meridiaen, going out of both the Poles, over the Pice of Teneriffe, as the beginning of the length, F the Cape Sint Vincent in Spaine, there over muſt be brought the Meridian AFG the part of the Equinoctiall DG (betwixt theſe two Meridians) is the length of the Cape S. Vincent 23 degrees, 40 minutes, and the bow GF the parts of the Meridian, betwixt the Line and the foreſayd Cape is the northermoſt breadth 37 degrees, becauſe the foreſayd Cape lyeth ſo farre from the midle-line to the north.



II. Example.

H being the Cape de bona Eſperance, the ſouthermoſt point of Africa, & there is drawn over the Meridian A I HB, the part of the Equinoctial DI is the length of the foreſayd Cape, & H I the part of the Meridian betwixt the line and the Cape, the ſouthermoſt breadth 34 degrees, becauſe the ſame Cape lyeth ſo much from the line to the S. Alſo of other lands & places.

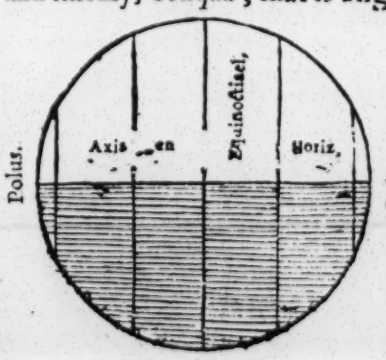
From the difference of the common flat Sea-mappes, with the round of the Earth.

In the common Sea mappes are the Sea-coaſts and corners of the Lands marked after her courſes & diſtances from the one to the other, alſo after her breadth: but becauſe of the unevereſſe which they have (through her flat forme, with the roundneſſe of the Earth) it is not poſſible to put the ſame alſo there beſides after her right length. All Meridians or lines from ſouth and north upon the Earth how farre the ſame upon the midle-line ſtand one from another, ſtretching northward or ſouthward, comes at the end of 90 degrees from the line upon a point together, but upon the flatt Sea-Cardes though the ſame Meridians ſtand cloſe or far one from another, they touch each-other never, but ſtand alwayes even farre one from another. Alſo with all courſes, except only that from eaſt and weſt.

Of the faſhion of the Sphera.

The Sphera is noted after 3 manner: 1 *In Sphera Recta.* 2 *Parallela*, and thirdly, *Obliqua*, that is Right Even-wide, and ſlooping Sphera.

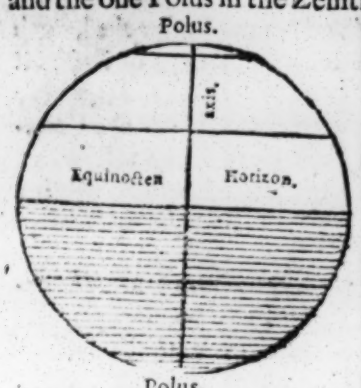
Explication.

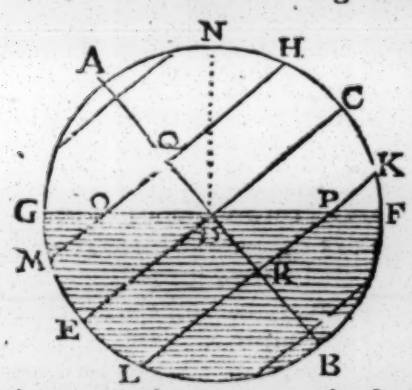


1. *Sphera Recta*, or right Sphera, is ſo called, becauſe that when the Poles of the World lye on the Horizon, and the Equinoctiall common with the Zenith, in manner as this Figure: All Heavenly Lights (as the Sunne, Moone, or Starres; or the ſame which ſtand cloſe by or farre from the Equinoctiall or the Pole) doe riſe

right up from the Horizon, and goe alſo right downward there under Al Starres, comming up together goe alſo together, (through the Meridian) under. And becauſe al Circles, which the Sunne, Moone, or Starres (through the dayly turning) doe deſcribe, are devided from the Horizon in 2 even alike parts, the foreſayd lights are alſo even 12 houres above, and 12 houres under the Horizon; Day & night are upon ſuch places alwayes, without changing, even long. So it goes with thoſe that dwel right under the Equinoctiall Line, without any breath, as in S. Thome, in ſome Moluques and the like lands, where none of both Poles are in height above the Horizon.

2. *Sphera Parallela*, or the Sphere of evenwideneſſe, is alſo called, becauſe that when the Aſſe of the World ſtandeth right in the height, and the one Polus in the Zenith, the Equinoctiall lyeth then common with the Horizon, ſo as this figure doth ſhew. At the place upon the Globe of the Earth, where ſuch an ſituation of the Sphere is, are al the Starres of the Firmament (through the dayly moving) carried round Parallel, or even-wide with the Horizon. All thoſe which are above the Horizon, ſtay continually there above, without going under all thoſe which are there under, ſtay alſo continually there under, without going up. Out of which followeth (becauſe the half one part of the Equinoctial time ſtayes above the Horizon, and the other halfe part there under) that the Sunne being in the part of the Ecliptica that ſtandeth above the Horizon goeth alſo not under, but maketh a day of ſix moneths: To the contrary, being in the part of the Horizon, comes not up, and maketh alſo a night of ſix moneths.





3. *Sphera obliqua*, or ſlooping Sphera, is ſo called, becauſe the Aſſe of the World, nor the Equinoctiall lay not flat downe, nor ſtand right upon the Horizon; but thwart krooked, through which comes that all Lights of the Heavens goe not right up from the Horzon, nor evenwide there by along, but riſe ſlooping there above, and ſo againe downewards. So that ſome Starres about the high Pole, alwayes ſtay above. To the contrary, the ſecret Pole there about commeth never above, and makes ſome other unlike up-goings and undergoings. Thoſe which ſtand from the Equinoctial to the high pole are more (which after the ſecret Pole, leſſe) then 12 houres above the Horizon. Alſo goes it with the Sunne. Out of which followeth, that thoſe, which dwell in ſuch an Sphera, have the dayes and nights unlike: ſometimes long and ſometimes ſhort againe. How the one pole is higher above the Horizon how unliker the dayes and nights are, and the up and undergoing of the up and undergoing of the ſtarres are alſo unliker, becauſe the Circles which they doe deſcribe, in going round, are cut in more uneveneſſe from the Horizon.

Example.

F D G being the Horizon, C D E the Equinoctiall, B D A the Aſſe of the World, not right up to the Zenith N, nor common with the Horizon F D G, but the one Polus there above in the height, as from G to A, the other going downe there under, from F unto B. Alſo the Equinoctiall with all parralleles, thwart upon the Horizon. Let the Sunne be on the Tropicum Cancri H Q M at the mid-night upon the loweſt under the Horizon on M: becauſe he goeth in 12 houres from mid-night to midday, from M to H, he goeth the halfe part, from M to Q in 6 houres, and therefore in leſſe then 6 houres from M to O on the Horizon, where he riſeth, and in more then 6 houres from Q to H, the halfe day ſhall then be longer and the halfe night ſhorter then 6 houres. To the contrary, let the Sunne, be on the Tropicum Capricorni at mid-night on L, he ſhall goe from R to L in 6 houres and more then 6 houres till on P, on the Horizon there upon he goes, and therefore in leſſe then 6 houres from P to K on the mid-day, ſo that the halfe day is ſhorter and the halfe night longer then 6 houres.

The uſance of the Aſtrolabium and Degre-bow.

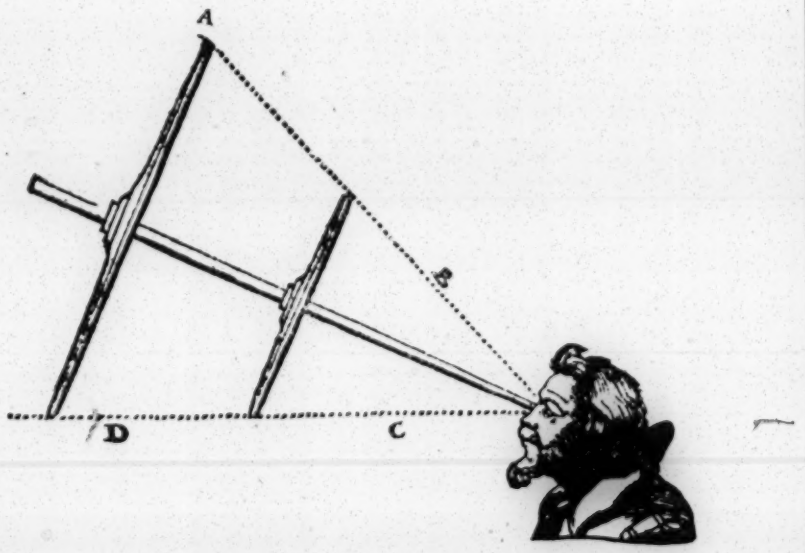
HOld the Aſtrolabium with the finger by the uppermoſt ring, and let the Sunne ſhine in the uppermoſt eare (or little Table) till right upon the Lowermoſt eare, the utmoſt of the wiſer ſheweth then the outſide of the height of the Sunne. In the piloting men muſt have a care that the Aſtrolabium be loſe and doth drive untyed, the moſt part of all theſe can be turned with the hand, the fourth part of an degree, to ſhew over the one or the other ſide.

Set the Degree-bow with the one end of the ſticke (being on the inſide or out-ſide of the eye) after this manner: that the end of the ſticke comes right to ſtand next the middle-point of the moving of the eye ſight, putt then the croſſe ſo long off from you or unto you, till the uppermoſt end comes upon the middeſt of the Sunne or Starres, and the lowermoſt even on the Horizon; The Croſſe ſhall then on the ſticke ſhew the degree of the height of the Sunne.

If the Sunne be farre or cloſe gone up from and above the Horizon that can not mis-lead a man in the uſing of the Aſtrolabium, but it is not ſo with the Degree-bow. The Sunne or Stars being riſen high from the Horizon the croſſe comes nearer to the eye, then if the ſame were but a little riſen and ſtood cloſe by the Horizon. Through which it makes the eye (ſeeing to the lowermoſt, then againe to the uppermoſt end of the Croſſe) to greater moving and up-doings, when as the Sunne and the ſtarres ſtand low. And becauſe the middlemoſt of the eye-ſight, through ſuch moving up and downe alſo is moved up and downe next the end of the ſtricke: men doth ſee then ſmaller corners, then if it did ſtaye unmoveable, without up and down-going next the end of the ſticke, therefore cometh the croſſe nearer to the eye then it ſhould be, and men doth finde to much height. Such is wel known by many experienced men, which therefore ſhortned their ſticke ſomewhat, or did putt the beginning of the Degrees one degree and an halfe nearer on the eye-end, but it is not the right way for to mend the foreſayd failings. The beſt of all is (as I thinke) that a man upon every ſundry height that he will make, prove, with 2 Croſſes ſett upon alike Degrees, how men muſt putt the ſticke in order, that men the ends of the ſame two Croſſes may ſee right over another; having found that, and the one Croſſe afterwards putt off, and ſett the ſticke againe in the ſame faſhion as before, men ſhal alſo paſſe al failings which might come out of the up & down-going of the eyes and can in any way be mended.

Example.

Deſiring to meaſure the height of the Sunne, or the height of ſome Starres in the ſouth I make an account how high the ſame ſhall ſtand, or I take the right height thereof before the ſame comes in the ſouth, which I take to be 50 degrees, ſet therefore the 2 Croſſes each upon their 50 degrees, and the ſtick in the corner within, or in the ſplitt of the eye without the eye, and turne the head before or behinde over the one or the other ſide, till that I ſee the utmoſt ends of both the Croſſes right over another, as the lines A B and C D, in the following figure doe ſhew. The ſame figure appeareth plainly, that the eye-ſight-ſtrales over the end of the Croſſes ſhall come then over another with the Lines, which men may draw over the ends of the Croſſes, untill the point on the end of the ſticke, which doth agree with the Center of the quadrant, or the beginning of the alike points whereupon the ſticke is marked. Such faſhion of a ſticke be kept in the memory, I take the one Croſſe off, and ſett the ſticke againe in the foreſayd faſhion on the eye, and count alſo without any fault of the eye.



Men doth meaſure as well with the Degree-bow as Aſtrolabium two ſeverall things alike. The height of the Sunne or of ſome ſtarres above the Horizon, and alſo their fulfulling of the height, that is, how farre the ſame ſtand from the uppermoſt point of the heavens above our head.

The edge of the Aſtrolabium is commonly marked with dobbel number, the one begins from beneath upward, with 1, 10, 20, 30 &c. Ending above next the Ring with 90. The other begins above next the Ring with 1, 10, 20, 30, downwards, ending with 90 on the lowermoſt ſide of the halfe Circle. When as you doe make an account in the Sunne with an Aſtrolabium and that you doe uſe the firſt number, that ſheweth, how many degrees the Sunne ſtands elevate above the Horizon, therefore the higher the ſame ſtands, the more number you doe get. If you doe uſe the other number you doe not finde the height of the Sun, but the fullfilling of the height, that is, how farre the Sunne ſtandeth from the uppermoſt point of the heavens, above our head, and therefore how the Sunne ſtands higher, how leſſer number (contrary to the other) you doe become.

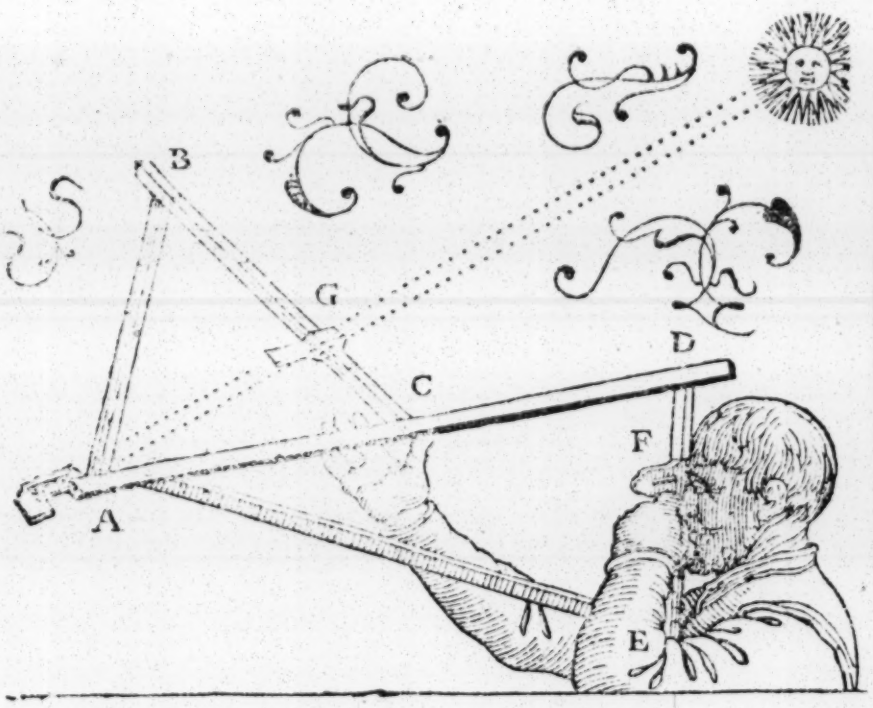
The Degree-Bow is alſo marked with 2 ſeveral numbers, the one hath after

after the eye-end 90 and is to the utmoſt end counted leſſe, as from 90 till, 80, 70, 60, &c. The other begins by the eye-end, and waxeth, to the contrary, after the utmoſt end, as from 1 to 10, 20, 30 &c. When as you meaſure the Sunne or any ſtarres with the Degree-Bow, and that you doe uſe the firſt number, you finde then, how higher the ſame ſtandeth above thé Horizon, how higher the Sunne and Starre ſtand, how a men then gets the Croſſe Cloſer to the eye. If you doe uſe the other number, you finde not how high any heavens light is, that men doth meaſure above the Horizon, but how further that ſtandeth from the Zenith the lower the ligths ſtand & the Croſſe comes further from the eye, and the number is more.

Although men in the meaſuring with the Degree-bow to the Sunne (for the ſtrengthening of the eyes) uſed redde or little blew glaſſes not with ſtanding is it trouble ſome and an hinderance for the eye-ſight, eſpecially when the ſame goeth high; Men can then eaſily finde the height of the Sunne out of his ſhadow, through ſuchlike turning. Degree-bow or double Three-corner, as here following is portrayed, whereof the one A B C containes 60 and the other, A D E 30 degrees: putting the litle turning thing of G upon a certaine number of Degrees, after the deſiring of the height of the Sunne, and ſeeing through the Viſire F, on the lowermoſt end of H the Horiſon, men doth move F ſo long up and downe, till that the ſhadow of G comes to fall upon the litle Table A, betwixt the two Lines, the number of the degrees putt then betwixt G C, and D F, together, it ſheweth then the height of the Sunne above the Horizon, or the numbers betwixt E F and G B, together the diſtance or Sunne ſtanding off from the Zenith.

Example.

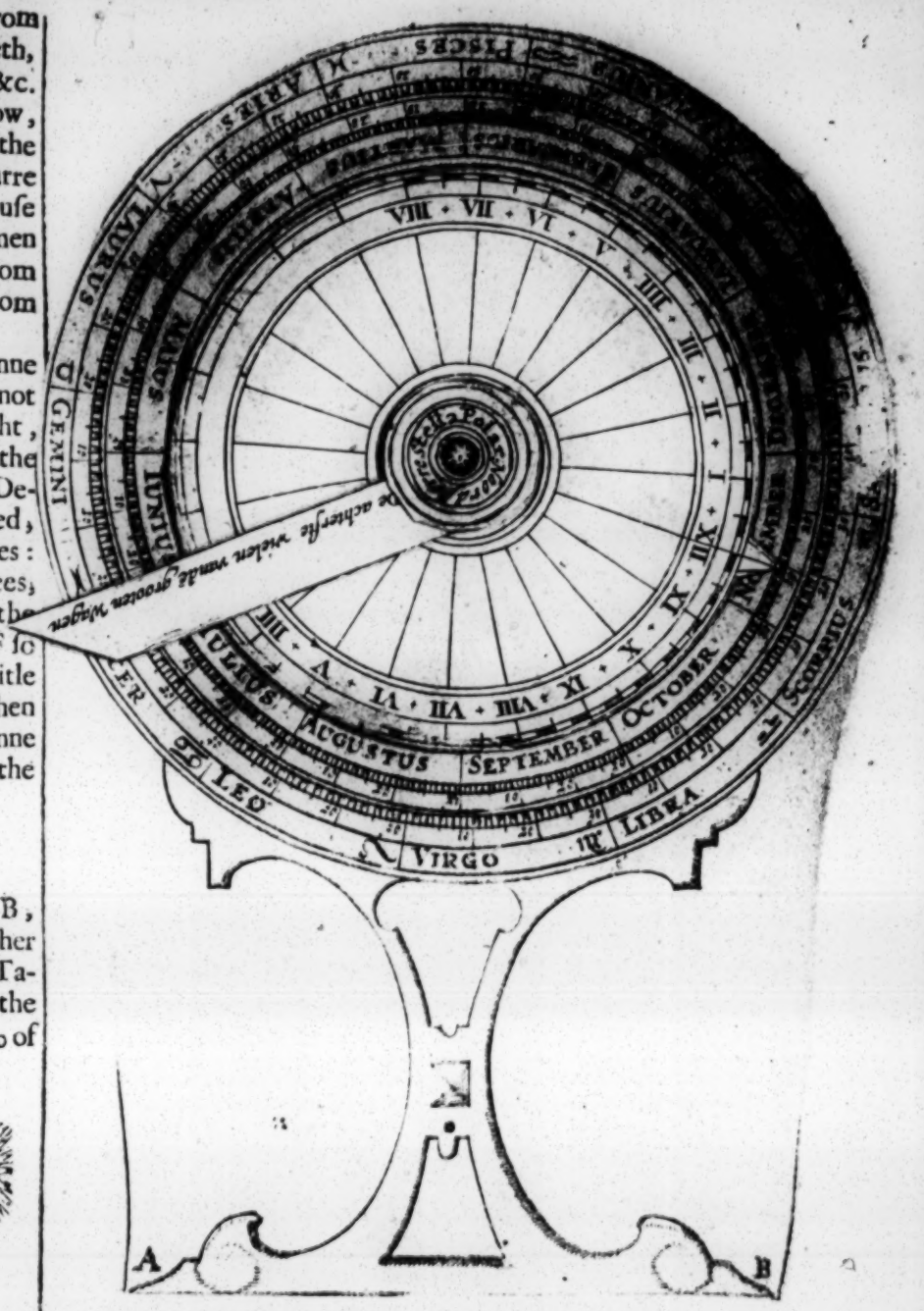
I putt the little moving thing of G upon 20 degrees, from C to B, ſeeing through the Viſire F, drawing it up and downe, till that together the ſchadow of G falls betwixt the two Lines upon the white little Table A, and the lower moſt ſide of the foreſayd litle table right upon the Horiſon, I finde ſo betwixt D and F 16 degrees, the ſame by the 20 of



G C, makes together 36 degrees for the height of the Sunne above the Horizon, or the 40 from G to B; and 14 from F to E, together 54, gives the fulfilling of the height, or the diſtance of the Sun from the Zenith.

For to finde the houre of the day and of the night.

FOr to find the houre by day upon all heights, is the beſt and ſureſt way, through ſuch an Equinoctiall-Compaſſe, as is portrayed in the water-tydes. In the night you may find the ſame through an night-wiſer as the following figure, the ſame hath two round ſhives, the one is unmoveable, the other moveable, upon the lowermoſt unmoveable ſtand the 12 Signes of the heavens, next the moneths and dayes of the year; upon the moveable, the houres, the ſame doth turne with another wiſe (whoſe one right ſide reſponts right upon the middle-point) beyond a nayle with an hole or pipe, through which you may ſee. The uſing of the night-wiſers is thus: Men ſet firſt the teeth, next the twelfth houre on the moveable ſhive, on the day of the yeare, upon the lowermoſt unmoveable ſhive, and hold the Inſtrument in the height, with the lowermoſt edge of the foot A B right waterpaſſe, ſo that men through the hole of the Nayle may ſee the North-ſtarre, turning then the wiſer upward and downward, ſo long till that the hinderſomeſt wheele of the great Wagon comes on the Wiſer, that being ſo, the Wiſer ſhall then ſhew, on the moveable ſhive, the right houre. If men in ſtead of the hinderſomeſt Wheeles of the great Wagon doth uſe the cleareſt of the Watchmen it ſhall be 4 houres and 15 minutes later then



the wiſer ſhall ſhew, becauſe the foreſayd Wheeles of the great Wagon goeth ſo many times before.

Men can alſo finde the houres out of the right Aſcenſion of the Sunne and Starres, thus: when you ſee ſome Starre in the ſouth, whoſe right Aſcenſion is knowne, and men knowes alſo the right Aſcenſion of the Sunne upon the ſame day, drawing the Suns Aſcenſion from the Aſcenſion of the Starres, that which then remaineth muſt be dealth through 15 (for 15 degrees makes an houre) which doe ſhew the right houre of the ſame time. If the Aſcenſion be more then the Aſcenſion of the Starre, in ſuch a way ſhal men adde 360 degrees by the Aſcenſion of the ſtarre and goe then forth in ſuch a way as before is deſcribed.

I. Example.

Upon the tenth of April, in the evening I ſee in the ſouth the Hart of the Lyon, whoſe right Aſcenſion is 174 degrees. The Sunnes right Aſcenſion upon the ſame day is 19 degrees, take the ſame off from the Aſcenſion of the Starre, there remaines 128 degrees, the ſame devided through 15 I find 8 houres and 8 remaining degrees, and when 15 degrees make an houre, then makes every degree 4 minutes, the remaining 8 degrees make alſo 32 minuts of an houre, it ſhall then upon that time 8 a clocke, 32 minuts, to reckon off from the midday.

I I. Example.

Upon the fifth of November in the night I finde in the ſouth the Starre *Aldebaran* the ſouther-eye of the Bul, whoſe right Aſcenſion is 64 degrees, the Suns right Aſcenſion upon that day 220 degrees, which is more then theſe of *Aldebaran*, therefore I put unto the Aſcenſion of the Starre 360 degrees, is together 424 degrees, drawing there out the Sunnes right Aſcenſion 220, there remaines 204 degrees for the difference of the time betwixt the Sunne and the foreſayd Starres, the which devided through 15, comes 13 houres, and alſo 9 remaining degrees, theſe make 36 minutes, it is then 13 hours and 36 minutes from the midday, that is, one houre 36 minutes after midnight.

For to find the Aſcenſion upon every day of the Yeare, as well of the Sunne as of the Starres, we have put here unto two little Tables, the one of the Sunne, ſhewing from 5 till 5 dayes the Sunnes Aſcenſion, out of which the ſame for other dayes there betwixt eaſily may be found. The other for 30 of the principal Starres, both only by degrees, becauſe this will ſerve very well to that end.

A table of the right aſcenſion of the Sunne.

The firſt number in the table ſheweth the day of the moneth, he ſecond the degrees of the aſcenſion of the Sunne on that day.

Ianua.		Febr.		Mart		April.		May.		Iunius	
da	gra.	da	gra.	da	gra.	da	gra	da	gra.	da	gra.
5	287	5	319	5	346	5	14	5	42	5	73
10	292	10	324	10	351	10	19	10	47	10	7[illegible]
15	297	15	329	15	355	15	24	15	52	15	83
20	303	20	334	20	400	20	28	20	57	20	88
25	308	25	339	25	4	25	33	25	62	25	94
31	314	28	342	31	10	30	38	31	68	30	99

Iuliu.		Augu		Sept.		Octo.		Nov.		Dece	
da	gra.	da	gra.	da	gra.	da	gra.	da	gra.	da	gra.
5	104	5	135	5	164	5	191	5	230	5	251
10	109	10	140	10	168	10	195	10	225	10	257
15	114	15	145	15	173	15	200	15	231	15	263
20	119	20	149	20	177	20	205	20	236	20	268
25	124	25	154	25	182	25	209	25	241	25	274
31	130	31	159	30	187	31	215	31	246	31	281

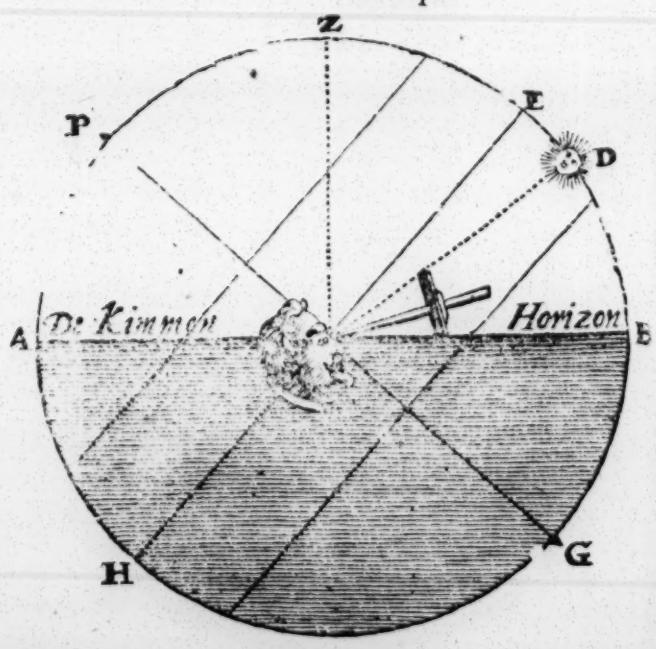
A Table of the right aſcenſion of the primeſt Starres.

THe Girdle of Andromeda.	12 degrees
The cleareſt in the head of the Ram.	27 degrees
Menkar the brighteſt in the mouth of the Whales	41 degrees
Aldebaran, the ſouth eye of the Bull	65 degrees
Capella in the left ſhoulder of Erichtonius	72 degrees
Regel the left foot of Orion.	74 degrees
The ſtar in the left ſhoulder of Orion	81 degrees
Syrius the great Dogge	97 degrees
The north head of Gemini.	180 degrees
The ſouth head of Gemini	111 degrees
Procyon the little Dogge	110 degrees
The brighteſt in the waterſnake, Cor Hydræ	137 degrees
Regulus the Hart of the Lyon	157 degrees
The tayle of the Lyon.	172 degrees
Vindemiatrix the right wing of Virgo	191 degrees
Spicia Virginis the eare of corne	196 degrees
Arctinus the brighteſt in Bootes	210 degrees
The ſouth Waight	224 degrees
The north Waight	210 degrees
The brighteſt in the north Crowne	230 degrees
Antars, the Hart of the Schorpion	242 degrees
The Head of Herculus	254 degrees
The head of Serpentarius	249 degrees
The tayle of the Eagle.	282 degrees
Vultur the cleareſt in the Eagle.	293 degrees
The ſtar in the mouth of the horſe Pegaſus	321 degrees
Fomahant the brighteſt in the end of Aquarius	339 degrees
Markab the ſhaft or foot of Pegaſus	342 degrees
The uttermoſt in the wing of Pegaſus	358 degrees
The moſt northerly in the Whales tayle	360 degrees

How to finde the height of the Pole by the Sunne.

TO finde the height of the Pole by the Sunne, one thing is ſpecially to bee marked, to wit, wheter you are northward or ſouthward from the Sunne, whether the Sunne ſtandeth northward or ſouthward from you is eaſily knowne, when you are in ſuch a place upon the earth as is far frō the Line, or from the Sun but when the Sun is neare almoſt above your head, then you can not wel ſee it with your eye, therefore ſet a compaſſe before you that you, may ſee where N. and S. is, then take your Aſtralobium, & ſet it ſo that the one edge thereof ſtand right ſouth and the other north, and then you ſhall ſee at a hayres breadth, whether the Sunne being at the height, ſtandeth northward or ſouthward from the head poynt or Zenith: if then you wil ſeeke the height of the Pole, when you are on the north ſide of the Sunne, that is, when the Sunne is ſouthward from you, then take the juſt height firſt, and as much as the declination of the Sunne is northward, take it out of your heigt & that which reſteth is the height of the Equinoctiall in the ſouth, which ſubſtracted out of 90 (as here before is declared) then you have the height of the north Pole.

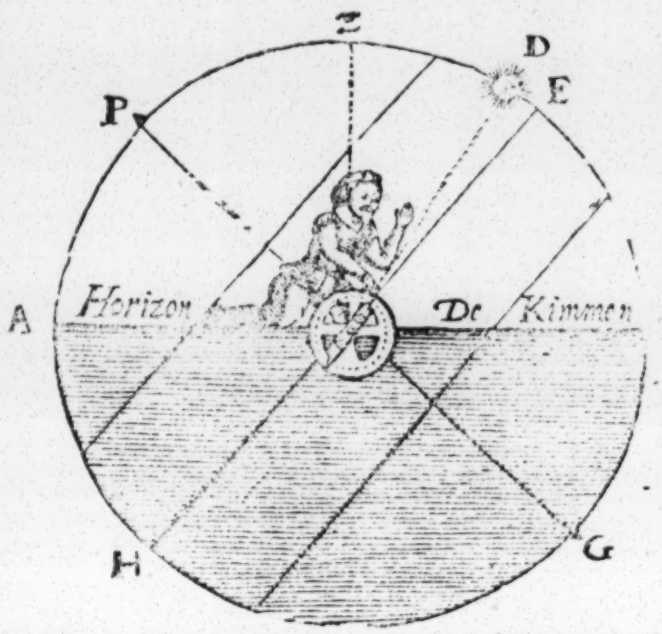
Example.



In this figure let P be the north Pole, and G the ſouth Pole E H the Equinoctiall, A B the Horizon, Z the Zenith, and D the Sun: let the height of the Sun B D bee ſixty degrees above the Horizon: the northerly declination D E 8 degrees: if then you take D E 8 degrees from B D the hight of the Sun, there will reſt B E 52 degrees, which is the height off the Equinoctiall, which taken out of 90 degrees, reſteth 38 degrees, for the height of the north Pole A P, as here before is ſheweth.

If the declination be ſoutherly, then adde into the height aforeſayd taken: and then if the addition be leſſe then 90, then looke upon the height of the Line in the ſouth, which taken out of 90, as aforeſayd, it leaveth you the height of the north Pole.

Example.

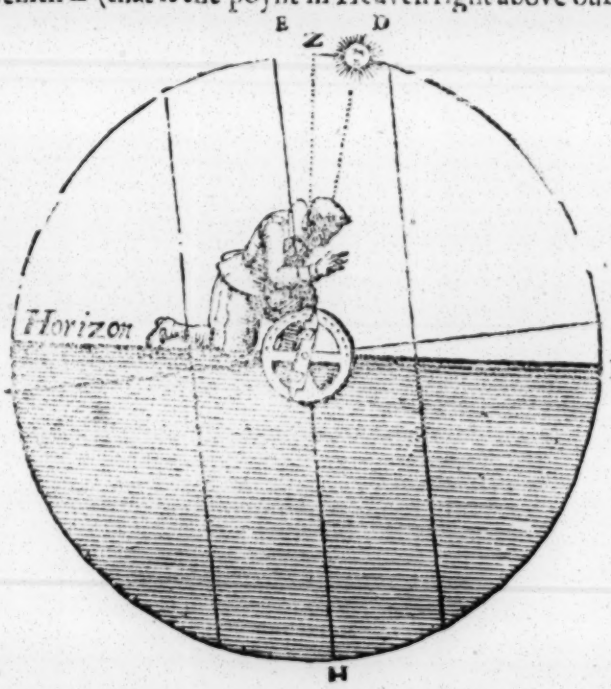


Let the height of the Sunne D B 40 degrees, the ſoutherly declination of the Sun then adde E D 20 deg. to D B 40 degrees, it maketh E B 60 degrees, the height of the Equinoctiall, which ſubſtracted frō 20, as E G the diſtance between the Equinoctiall and the S. Pole, then there will reſt 30 for G B, that is as much as the S. Pole is gone under the Horizon as before is ſhewed, ſo much as the one Pole is under the Horizon juſt ſo much is the other above it, the north Pole P ſhal here be elevated 30 deg.

But if the height of the Sun being added unto the declination maketh more then 90 degrees, then you muſt underſtand, that the Equinoctiall is northward from you head juſt ſo much as the aforeſayde addition is more then 90, and ſo conſequently the S. Pole alſo ſhall be ſo much elevated.

Example.

Looke into the figure next following, where in let the height be D B 80 degrees, and the ſoutherly declination E D 18 degrees, then if you adde E D 18 degrees to B D 80 degrees, the height of the Sun, there will be 90 degrees for B E, ſeeing then that from the Horizon B, to the Zenith Z (that is the poynt in Heaven right above our heads (is juſt 90 degrees as in the 12 Chapter is thaught) it followeth that Equinoctiall is 8 degr. northwards from the Zenith Z, and ſo 82 degrees elevated in the north, above the Horizon: when E A is taken out of 90 there reſteth 8 degrees for the height of the ſouth Pole, G above the Horizon B, then you muſt underſtād, that you are betweene the Line and the Sunne.



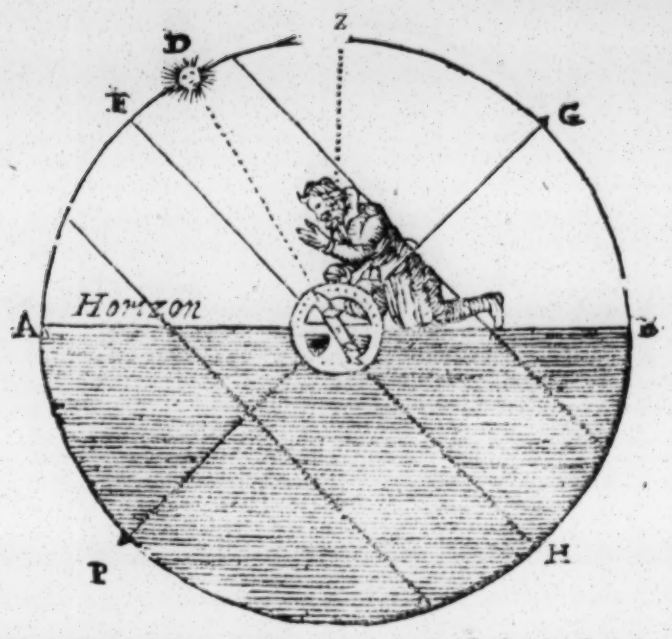
How you ſhall finde the height of the Pole, when you are ſouthward from the Sunne.

WHen you perceive that you are ſouthward from the Sunne, that is when the Sun ſtandeth northward from you, firſt (as aforeſayd) take the height of the Sun: then if the declination be ſouthwards, take it out of your height which you have found, and then you ſhall have the height of the Equinoctiall, which ſubſtracted from 90, it ſheweth under what height you are, ſouthward from the Line.

Example.

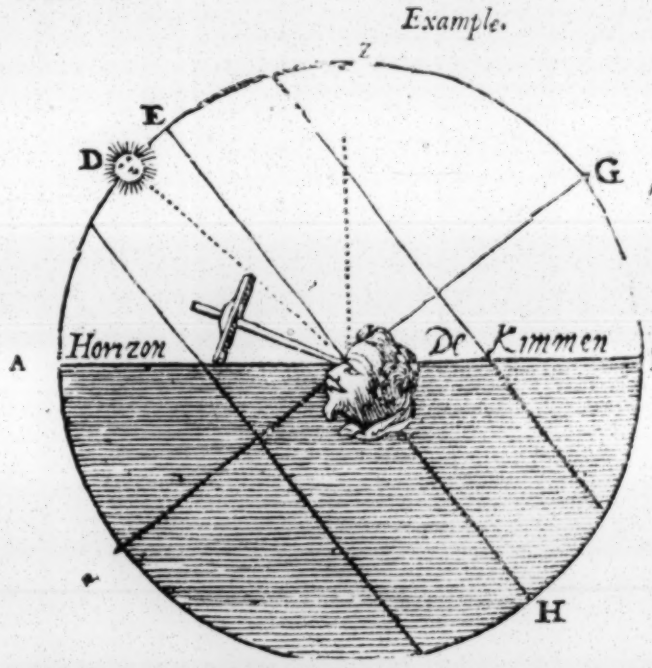
Behold the figuere above ſtanding. Let A D be the height of the Sunne in 64 degrees: the ſoutherly declination E D 16 degrees: which ſubſtracted from A D the height of the Sunne, there remaineth for A E 48 degrees the height of the Equinoctiall in the north, which ſubſtracted out of 90, then the height of the ſouth Pole G B will be 42 degr.

If the Declination be northerly, then adde it to the height found out, if then the addition bee leſſe then 19 it ſheweth you the height of the



of the Equinoctiall, which taken out 90, you finde the height of the ſouth Pole.

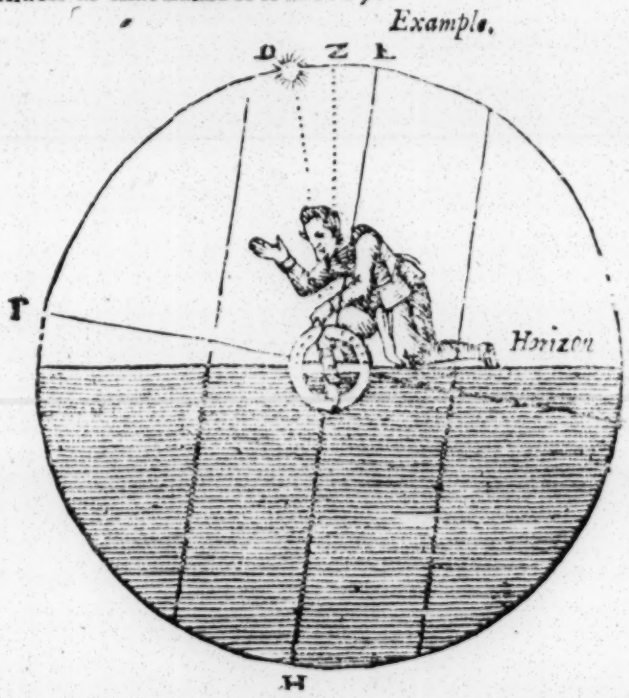
Example.



Looke on the figuere with his circles as it followeth here after, let A D the height of the Sun in the N. be 50 degrees and D E the northerly declination 15 degrees then adde E D 15 to D A 50 degrees, then you have 63 degrees for A E the height of the Equinoctiall, then G B, the height of the ſouth Pole is 25 degrees for as in the 16 former it is ſhewed, the height of the Equinoctiall E A with the height of the Pole G B alwayes make 90 degrees.

But if the height and the declination of the Sun added together more then 90, you muſt note that the Line is ſouthward from your Zenith, as much as that number is above 90.

Example.



Look on the following Figuere, let the height of the Sunne A D in the north be 84 degrees, the declination E D 21 degrees adde them together, then you have A F 150 degrees, which is the diſtance betweene the Equinoctiall E & the Horizon in the North: now mark that A E is 150, and P the Pole and E the Equinoctiall are even 90 degrees from each other then it followeth that P from A is 15 degrees, that is the height of the n. Pole above the Horizon, and ſo much you muſt be northward from the Line, and you muſt alſo marke that you are betweene the Line and the Sun.

How you ſhall finde the height when you are right under the Sunne.

IF you underſtand the rules before going well, then this is eaſie to be found. If you be right under the Sunne, that is when the Sun is elevated 90 degrees, then you are even as many degr. northward or ſouthward from the line, as the Sun hath northerly or ſoutherly declination.

The Explication thereoff.

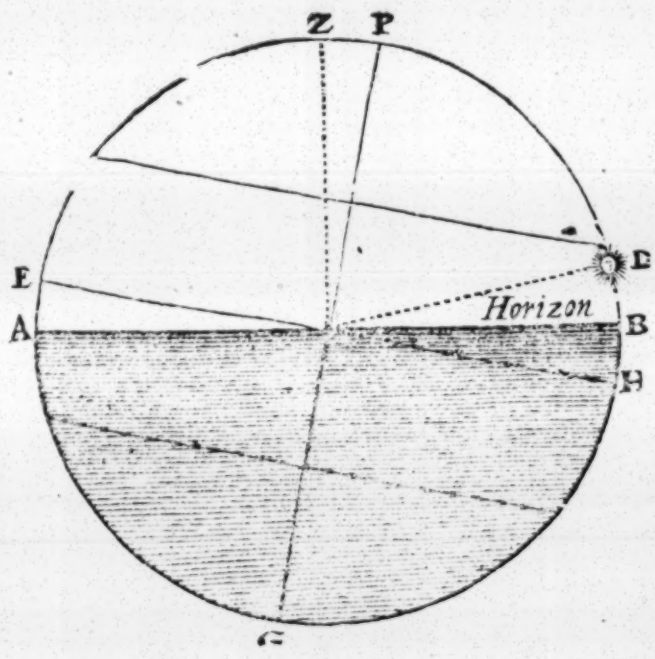
Suppoſe that you finde the height off the Sunne above the Horizon to be 90 degrees, and that it is declined towart the north 16 degrees, then are you alſo 16 degrees northward from the Line, and the north Pole ſhall be ſo much elevated.

But if the Sun hath no declination, that is, when it ſtandeth even in the line, then you muſt underſtand, that you are alſo right under the line and ſo both the Poles are on the Horizon without any elevation.

How you ſhall finde the height of the Sun northward in ſuch places where as it goeth not downe.

They that in Sommerſayle to Moſcovia, in the moneths May, June and Iuly, comming about the north Cape, finde, that the Sunne at that tyme goeth not downe there, but is allwayes above the Horizon, ſo that a man according to the rules aforeſayd, may not onely ſeeke the height off the Pole by the Sunne, when it is higheſt ſouthward, but alſo when it is northward at the loweſt, in this manner following. Take the height of the Sunne with the croſſe ſtaffe, when it is loweſt in the north, and adde there to the filling of the declination, (which is ſuch a number as together which the declination make ninetie, or ſo much as the Sunne ſtandeth from the Pole) and you ſhall find the juſt height of the Pole: or if you ſubſtract the height of the Sun from his declination then you ſhall find how deep the Equinoctiall is depreſſed northward under the Horizon, or in the ſouth elevated above the Horizon, which ſubſtracted from 90, will likewiſe leave the height of the Pole, both theſe wayes I will declare a part.

Example.



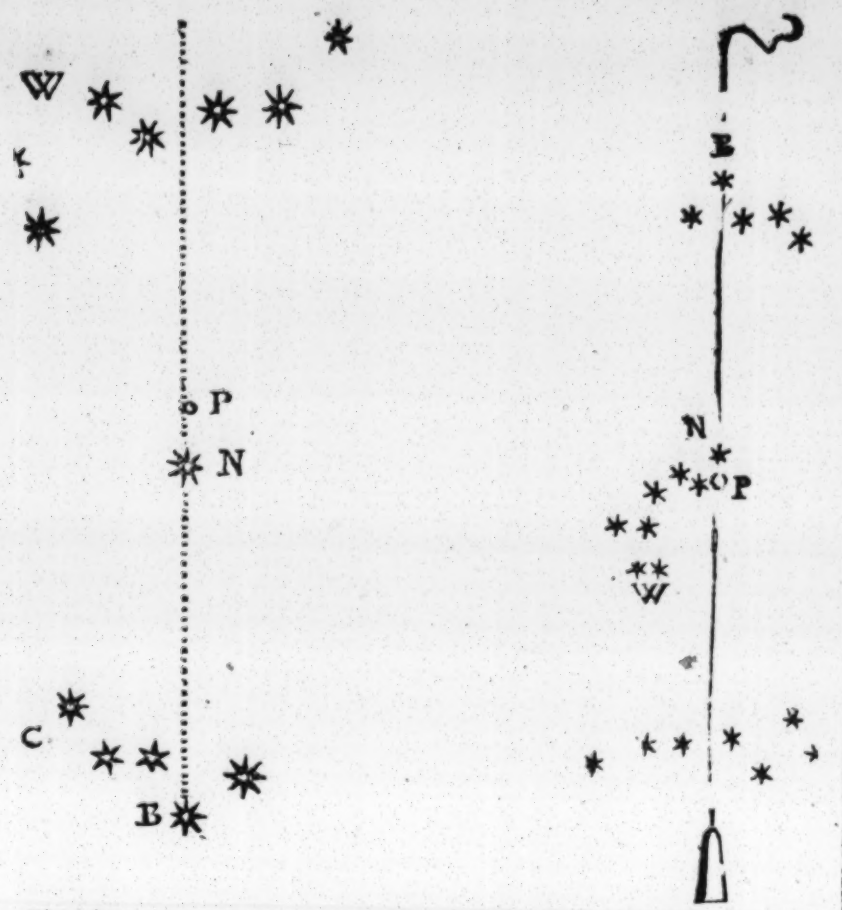
Mark the figuere aforegoing, where let B D be the height of the Sun about the Horizon, in the north 7 degrees H D the declination of the Sun 20 degrees, then ſhall D P the filling of the declination, or the diſtance of the Sun from the Pole be 70 degrees: now if you adde P D the filling of the declination 70, to be B D 7, the height of the Sun, you ſhall finde 77 degrees for B P the height of the Pole.

Another Example.

If you take the height of the Sun A D 7, from H D 20, the declination of the Sun, there will remain 13 for H B, and ſo much is the Equinoctial in the north depreſſed under the Horizon, which if you ſubſtract of P 93, there remaineth for A P 77, the height of the Pole, as above ſayd.

Of the north Starre, and how you ſhall find the height thereby.

ALL fixed Starres, as in te former writing is declared, with the time doe alter their declination ſome increaſe, and ſome demin ſh, one more then the other, the north Star at this tyme is one of thoſe which is moſt ſubject to changing, which in anno 1600 ſtood from the Pole two degrees 50 and a halfe minutes, and in the yare 1700 it will ſtand two degrees and 16 and a halfe minutes, ſo that every 3 yeare it commeth a minute nearer unto the Pole in Anno 1608 it ſtood from the Pole two degrees, 48 minutes, and thereof we have here made our reckoning, if then you will know the height of the north Starre when it is right under the Pole, then you muſt adde two degrees, and 48 minutes, to the height which ſhall be found by the Croſſe-ſtaffe, ſo it bee right above the Pole (that is the higheſt) then you muſt ſubſtract two degrees and 48 minutes, and then you ſhal have the right height, but to know when it is right under the Pole at the loweſt, then looke when the great Wagon ſtandeth right under the North Starre of Leyen, if you take a lead or ſtick, and let it hang in your ſight right upon Leyen, and the ſaid line or ſtick alſo hangeth right betweene the Wagon and the Horſes, then Leyen is right above the Pole at the higheſt: to the contrary, when the Wagon ſtandeth above Leyen and a Line is hanged betweene the Wagon and the Horſes, and hangeth right over Leyen, then Leyen is right under the Pole at the loweſt. This alſo may be marked by the Starr that ſtandeth in the breaſt of Caſſiopea, for when it ſtandeth right under Leyen, then Leyen is right under the Pole at the loweſt, and when it is right above Leyen, then Leyen is at the higheſt above the Pole. But to know the ſtarres that are in the breaſt of Caſſiopeia, you muſt underſtand, that it is the ſecond off the five higheſt Starres that ſtandeth in Caſſiopeia: or if you take a ſtaffe and hold it thwart-wiſe, with one end right betweene the Wagon and the Horſe, and the midle part over the north-Starre, then the other end will ſhow right upon the ſayd Starre, which ſtandeth in the breſt of Caſſiopeia, which wil eaſily bee underſtood by this figure



N is the north Starre: P is the North Pole, W is the Wagon, and C are the Starres off Caſſiopeia, where of B is the breſt.

This is a certaine and a generall rule, which by no meanes can fayle, and in all places off the earth (where we may ſee and uſe the North Starre) is without any alteration.

For to know when the north-ſtarre is upon the higheſt and loweſt, have a care upon the great Wagon, when the ſame com.meth under the north-ſtarre, ſo that when men let hang a lead-line right over the north ſtarre, that theſe then alſo comes to hang in the middeſt betwixt through the Wagon & the Horſes, then is the northſtarre right upon the higheſt above the Pole. Or when the Wagon alſo comes above the North-ſtarre, that then men doth hang a leadline betwixt through the Wagon and Horſes, that theſe then alſo hang right over the North-ſtarre, then is the North-ſtarre right under the Pole upon the loweſt, as in the former figure is portrayed.

Or when the ſtar comes in the Breſt of Caſſiopea, right above the North-ſtar, then is the North-ſtar above the Pole upon the higheſt.

When the ſame is right under the North-ſtarre then is the North-ſtarre, upon the loweſt under the Pole, ſo as theſe Figure here above doth ſhew.

The ſtarres of the Wagon are well knowne of every one. The ſtarres in Caſſiopea, there in 5 the principals, as here above is portrayed. The ſecond of theſe that is, which ſtandeth fartheſt diſtant from the North-ſtarre, theſe is in the Breſt, and ſtandeth almoſt even farre from the North-ſtarre, as the northermoſt fore-wheele of the great Wagon.

If men hold a right ſticke upon the eyeſight, with the one end throug betwixt the Wagon and the Horſes, and the middeſt over the North-ſtarre, the other end ſhall then ſtretch over the foreſayd ſtarre, which ſtandeth in the Breſt of Caſſiopea.

The uſe of the North-ſtar when you take the height by the wayters which are on the northern hinderwheele of the great Wagon.

FOr as much as many Pilots know north the names of many of the fixed ſtarred, and therefore follow the uſe of the N. ſtar according to the poynts of the compaſſe: we have for the uſe of theſe men, made two ſorts of tables the one acording to the waters (which we have mended,) the other according to the northern hinder wheele of the great Wagon, both ot them on the foure ſtrokes north, ſoutheaſt and weſt, and in as much as in this kinde or worke the north ſtar hath a different ſtanding in ſundry heights of the Pole, we have calculated the tables agreeing to divers heights or latitudes from 10 degrees to 10 degrees as followeth.

At the height of 10 degrees

When the brighteſt of the wayters ſtandeth in the
- Eaſt, then is the N. ſtar under the Pole 1 degrees, 18 minutes.
- North, then it is 2 degrees 48 minutes under the Pole.
- Weſt 1 degree 22 minutes. above the Pole.
- South 2 degrees, 18 minutes above the Pole.

At the height of 20 degrees.

When the brighteſt of the wayters ſtandeth in the
- Eaſt, the N. ſtar is 1 degree, 31 minutes under the Pole.
- North, the N. ſtar is 2 degrees 18 minutes under the Pole.
- Weſt, the N. ſtar is 1 degree, 19 minutes above the Pole.
- South, the N. ſtar is 2 degrees 19 minutes above the Pole.

At the height of 30 degrees.

When the brighteſt of the wayters ſtandeth in the
- Eaſt, the N. ſtar is 1 degree 25 minutes above the Pole.
- North, the N. ſtar is 2 degrees 18 minutes under the Pole.
- Weſt, the N. ſtar is 1 degree, 14 minutes above the Pole.
- South, the N. ſtar is 2 degrees 19 minut, higher than the Pole.

At the height of 40 degrees.

The wayters in the
- Eaſt, the N. Star is 1 degree, 39 minutes under the Pole.
- North, the N. Star is 2 degrees 10 minutes below the Pole.
- Weſt, the N. Star is 1 degree, 14 minutes above the Pole.
- South, the N. Star is 2 degrees 19 minutes above the Pole.

At the height of 50 degrees.

The wayters in the
- Eaſt, the N. Star is 1 degree, 44 minutes below the Pole.
- North, the N. Star is 1 degree, 3 minutes below the Pole.
- Weſt, the N. Star is 1 degree, 3 minutes above the Pole.
- South, the N. Star is 2 degrees 20 minutes above the Pole.

At the height of 60 degrees

The wayters in the
- Eaſt, the N. Star is 1 degree, 52 minutes under the Pole.
- North, the N. Star is 2 degrees 16 minutes below the Pole.
- Weſt the N. Star is 53 minutes higher than the Pole.
- South, the N. Star is 2 degrees 20 minutes above the Pole.

At the height of 70 degrees.

The wayters in the
- Eaſt, the N. Star is 2 degrees 5 minutes under the pole.
- South, the N. Star is 2 degrees 15 minutes under the pole.
- Weſt, the N. Star is 32 minutes above the pole.
- South, the N. Star is 2 degrees 22 minutes above the pole

At the height of 80 degrees.

The wayters in the
- Eaſt, the N. Star is 2 degrees 33 minutes under the pole.
- North, the N. Star is 2 degrees 12 minutes under the Pole.
- Weſt, the N. Star is 33 minutes under the Pole.
- South, the N. Star is 2 degrees 44 minut. higher then the pole.

The uſe of the North ſtarre, agreeing with the northermoſt hinder wheele of the Wagon.

At the height of 10 degrees.

When the northermoſt Wheele of the Wagon ſtandeth in the
- Eaſt, then is the N. Star higher then the pole 1 degree 1 minut.
- North, the north Star is 2 degrees 27 minutes above the pole.
- Weſt, the N. Star is 1 degree 14 minut. lower then the pole.
- South, the N. Star is under the Horizon out of ſight.

At the height of 20 degrees.

The northern weel of the Wagon.
- Eaſt, the N. ſtar is 54 minutes higher then the pole.
- North, the N. ſtar is 2 degrees 27 minutes under the pole.
- VVeſt, the N. ſtar is 1 degree 26 minutes lower then the pole.
- South, the north ſtar is 2 degrees 27 minutes above the pole.

At the height of 30 degrees.

The northermoſt hinder-wheele of the VVagon.
- Eaſt, the N. ſtar is 47 minutes higher then the Pole.
- North, the N. ſtar is 2 degrees 27 minutes under the pole.
- Weſt, the N. ſtar is 2 degrees 26 minutes above the pole.
- South, the N. ſtar is 2 degrees 27 minutes under the pole.

At the height of 40 degrees.

The northermoſt hinder VVheele.
- Eaſt, the N. ſtar is 38 minutes. above the pole.
- North, the N. ſtar 2 degrees 27 minutes under the pole.
- VVeſt, the N. ſtar is 1 degree 34 minutes below the pole.
- South, the N. ſtar is 2 degrees 28 minutes above the pole.

At the height of 50 degrees.

The northermoſt VVeele.
- Eaſt, the N. ſtar is 24 minutes above the pole.
- North, the N. ſtar is 2 degrees 34 minutes under de pole.
- VVeſt, the N. ſtar is 1 degree 45 minutes under the pole.
- South, the N. ſtar is 2 degrees 28 minutes above the Pole.

At the height of 60 degrees.

The northermoſt hinder-VVheele.
- Eaſt, the N. ſtar is 1 minutes above the pole.
- North, the N. ſtar is 2 degrees 26 minutes under the pole.
- VVeſt, the N. is 2 degrees 1 minute under the pole.
- South, the N. ſtar is 2 degrees 28 minutes above the pole.

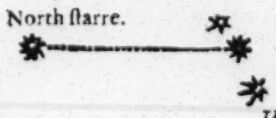
At the height of 70 degrees.

The northern hinder VVheele.
- Eaſt, the N. ſtar is 14 minutes under the pole.
- South, the N. ſtar is 2 degrees 25 minutes under the pole.
- VVeſt, the N. ſtar is 2 degrees 22 minutes under the pole.
- South, the north ſtar is two degree 29 minut. above the pole.

At the height of 10 degrees the north hinder VVheele of the great VVagon can not come from the Horizon at the ſame high with the north-ſtar.

Explication, of the E. W. S. and N. of the Watches, and the great Wagon.

North ſtarre.



THe VVachtes eaſt, that is, when the cleareſt or middlemoſt ſtandeth to the Eaſt even high above the Horizon, ſo as the North-ſtarre, in manner as this figure doth ſhew.

North ſtarre.

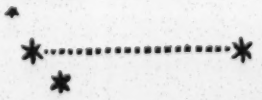
Watches.

The Watches North, is, when the cleareſt ſtandeth right above the North-ſtarre, as in this ſecond Figure.



watches.

Watches.

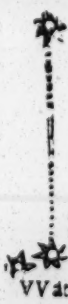


The VVatches in the weſt, that is when the middlemoſt of the VVatches ſtands to the weſt from the North-ſtarre and which the ſame even high above the Horizon, as in this third Figure.

North-ſtarre.

North-ſtarre.

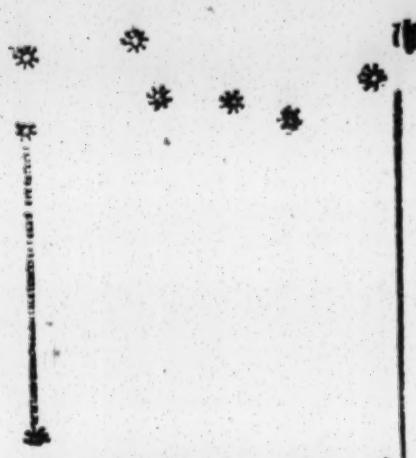
The watches in the ſouth, that is, when the cleareſt of the ſame ſtandeth right under the North-ſtarre, as in this fourth Figure.



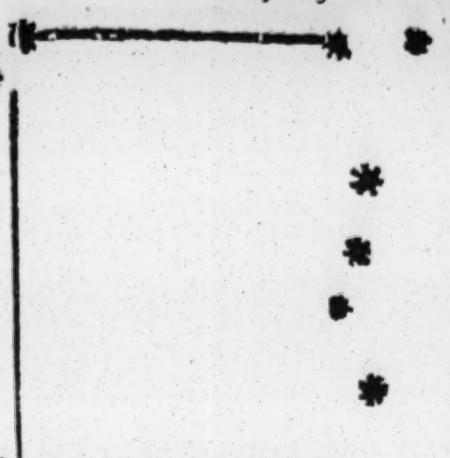
Upon this manner, as from the VVatches, is alſo to underſtand the Eaſt, VVeſt, South, and North from the northermoſt Hinder-VVheele of the great VVagon, thus:

VVatches

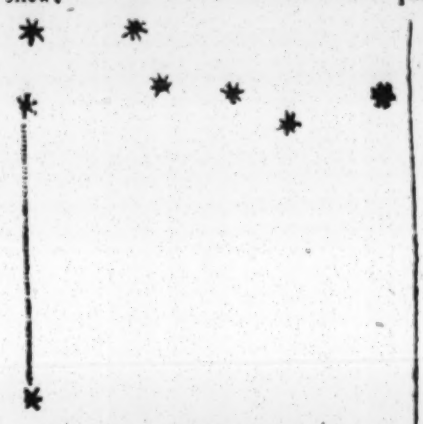
The



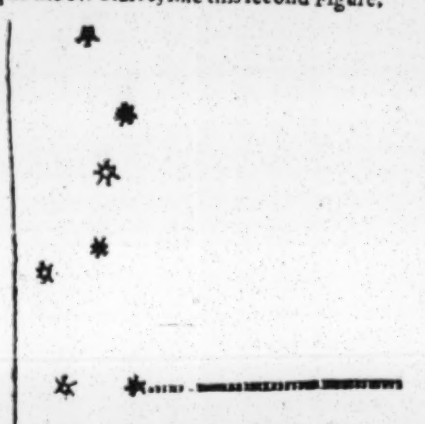
The northermoſt hinder-wheele in the north, that is, when the ſame is right above the Norte-ſtarre, as this firſt Figure doth ſhew.



The northermoſt hinder-wheele of the VVagon in the eaſt, that is, when that doth ſtand eaſtward even high above the Horizon, as the N. Starre, like this ſecond Figure.



That ſame hinder-wheele in the weſt that is, when it ſtandeth weſtward even, high, ſo as the North-ſtarre above the Horizon, as in this Figure.



That ſame Hinder-wheele of the VVagon in the ſouth, that is when it ſtandeth right under the North-ſtarre, as in this fourth Figure.

The uſing of theſe foreſayd Tables.

Men ſtayes till that men hath the cleareſt of the Watches, or the northermoſt Hinder-wheele of the great Wagon upon ſome of the foreſayde courſes, then makes men an account of the height of the North-ſtarre above the Horizon. Out of the found height, together with the preſuming, men doth almoſt know the height of the Pole, ſpecially cloſe by, for to finde out of the foreſayd Tables how much the North-ſtarre ſtandeth higher or lower then the Pole. Is the ſame higher, men pulls it off is it lower, men putts that unto the meaſured height, and find alſo the right height of the Pole.

Theſe foreſayd Tables are onely counted from ten till ten degrees, and when a man is moſt betwixt ſuch heights, ſhall men (comming upon other heights) take notice how many degrees he is above or under theſe counted pales, and with one how great the difference is betwixt ſuch two, as he findes himſelf, having taken notice hereof, men takes then the difference, after the courſe of the height where a man is in, leſſe or more from the foreſayd, taking off or putting to the ſame, ſo as it comes to paſſe.

I. Example.

I deſire to know upon the height of 46 degrees, how much the North-ſtarre ſtandeth lower then the Watches in the eaſt, taking notice how great the difference is betwixt the height of 40 and 50 degrees, finde 5 minutes in creaſing; ſay therefore: 10 degrees in height give five minutes, how much then 6 degrees? Facit 3 minutes, ſett theſe by the 1 degree, 39 minutes, which I doe finde in the Table next the 40 degrees (becauſe the difference of 40 till 50 degrees is increaſing) finde alſo 1 degree 42 minutes.

II. Example.

Upon the height of 48 degrees, I deſire to know how much the North-ſtarre ſtandeth higher then the northermoſt Hinder-wheele of the Wagon in the Eaſt, the difference and Table betwixt 40 and 50 degrees height, is 40 minutes diminiſhing; ſay therefore: 10 degrees difference height, give 14 minutes, how much 8 degrees? Facit, roome 11 minutes, drawing theſe from 38 minutes, ſtanding next the 40 degrees height, becauſe the difference from 40 til 50 degrees diminiſhetn, finde 27 minutes, that the North-ſtarre ſtandeth to high upon the foreſayd height of 48 degrees.

Of the vapours and exhalations which the ſunne, moon and Stars, as they are nearer the Horizon do ſeem to draw up more, as indeed and truth they are.

EXperience techeth, that the lights of heaven, by how much they are nearer the Horizon, by ſo much doe they ſeeme to be higher then indeed they are; and by reaſon of the fumes, which continuall ariſe and as they are nearer the Horizon, ſo much as they more thicker, and riſing by little and little, they leſſer, and at the leaſt are clean vaniſhed, and as we come nearer the Pole, the vapours do more & more increaſe, and for that cauſe doe the lights ſeeme to be higher than they are. Yea it is found about the height of 83 degrees, towards the north, that the Sunne ſeemeth to be 40 minutes higher than in truth is, this hath famous Aſtronomer Ticho Brahe, ſearch out and written in Denmarck, as you may ſee in this table.

A table of the riſing of the Sunne.

Degrees.	Minutes.	
0	34	
When the Sunne if duo on be hight 1	26	higher than indeed it is.
2	20	
4	15	
7 ſeemes	13	
10	10	
16	7	
23	3	
32	1	

A table of the riſing of the Starres.

Degrees.	Minutes.	
0	30	
When the Stars are of the night. 1	22	To be higher than indeed they are
2	18	
4ſeeme 7	11	
7	8	
11	5	
15	3	

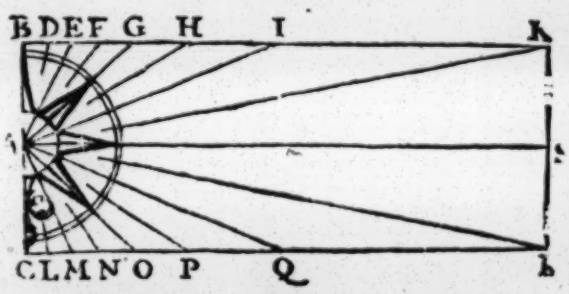
The uſe of this table will we declare by an example and whatſoevet may be ſaid of the riſing of the Sun, the ſame may be ſaid of the ſtarres.

Example.

LEt the height of the Sun be meaſuted; and found to be 7 degrees above the Horizon, and in the table of the Sunne above written; there are 13 minutes which the Sun ſeemeth to be higher than it is, therefore ſubſtract 13 minutes from the 7 degrees, there will remaine 6 degrees 47 minutes for the true height of the Sun.

But if we take the diſtance of the Sun from the Zenith according to this example, it would be found to be 83 degrees, and then the 13 minutes added to the 83 degrees the product is 83 degrees 13 minutes for the true diſtance of the Sun from the Zenith, then if we take 83 degrees 13 minutes from 90 degrees there will remaine 6 degrees 47 minutes as before, and ſo will it be in all the other.

How many miles or leagues you muſt ſayle on every poynt of the compaſſe before you ſhall get a degree in breedth of the land.



VVHen you ſayl right ſouth or right N. on any one poynt of the compaſſe, as from A to B or C, you ſayle for a degree 15 leagues. And you ſtay under the ſame Meridian.

On the poynt north and by eaſt, or ſouth and by eaſt, as from A to B or L, you ſayle for a degree 15 and a halfe leagues.

And then you are out of the Meridian whence you ſayled, as it were from B to D — 3 leagues
Northnortheaſt and ſouthſoutheaſt, as from A to E or M, for a degree — 16 leagues
You are from the Meridian whence you ſayle 6, leagues as from B to E.
Northeaſt and by north, and S.E. and by ſouth you ſayle as from A to B or N. — 12 leagues
You ſhall bee without the ſame line as from B to F. — — 10 leagues
Northeaſt and ſoutheaſt, you ſayle for a degree as from A to G or O — 21 leagues
You are then of the north and ſouth line whence you ſayle as it were from B to G or C O — — — 15 leagues
Northeaſt and by eaſt and S.E. and by eaſt, as from A to H or to P for a degree 27 leagues
You are then out of the firſt Meridian, as from A to H, or C P — 22 leagues
Eaſtnortheaſt or eaſtſoutheaſt, you ſaile for a degree as from A to I or Q 39 & a halfe leag.
You ſhall be out of the Meridian, as from B to I or from C to Q — 36 leagues
Eaſt and by north or eaſt and by ſouth, as it were from A to K or R you ſayle for a degree — — — 77 leagues and a halfe.
Then are you out of the Meridian, as from B to K, or from C to R.
Eaſt or weſt, as from a to S. you remaine between the Pole and Equinoctiall on the ſelfe ſame breadth of the earth or land.

Of the changingh of the Compaſſes.

THe needle of the ſteele under the Compaſſe, whetted with the Saile-ſtone, drawes at ſeverall places ſeverally, at ſome right to the north, at other turnes it to the eaſt, and other-wayes to the weſt. As per Example: By the Ilands of Corvo and Flores, (the weſtermoſt of the Flemmiſh Ilands.) By Helmſhuy a little by weſt the north-Cape. About 30 leagues weſtward from the ſouth-corner of Spits-bergh, by eaſt the Cape de Bona Eſperance, on the Cape das-Aguilhas, and at more places as, wel in Eaſt as in Weſt-Indies, ſheweth the wetted needle right north Weſt-ward from the Flemmiſh Ilands by eaſt the North-cape. On *Nova Sembla*, on the Coaſt of Spits-berge, and by eaſt the Cape das Aguilhas, upon the whole Indis Sea ſheweth the ſame from the north to the weſt-ward, and by eaſt the Flemmiſh Ilands, by weſt the Cape de Bona Eſperance, and more other places from the north eaſt-ward. The turning off from the needle is then partued in two, to witt, from the north to the weſt, which by the Dutchmen is called weſtering or north weſtering, and from the north to the eaſt, which is called eaſtering or north-eaſtering. Every one of theſe is alſo devided in two, to witt, increaſing and diminiſhing eaſtering; as alſo, increaſing and diminiſhing weſtering Increaſing Eaſtering or weſtering, is, when a man ſailes from weſt to eaſt, increaſing and diminiſhing, which then doth diminiſh. The ſame can be more plainly underſtood by Examples, as followeth:

I. Example.

If a man doth ſaile from the Ilands Corvo and Flores, where the needle ſheweth right eaſtward on to the coaſt of Spaine, the needle beginnes (and in time more and more) to turne off from the north to the eaſt, til a man come a litle by eaſt the Iland S. Brandaon where the ſame is upon the higheſt 22 degrees, of 2 whole ſtroakes, that is, Increaſing northweſtering. Sailing forth from thence it begins to diminiſh, til next the ſouth-point of Celebes, where the needle draweth right again, that is called diminiſhing northweſtering.

For

For the common Navigation from the Nether-lands upon Eaſt, North-England, til France and Spaine, are the Steeles (for to make the lilly, to ſhew right North) laid faſt under the Roſes, about 2 third parts of a ſtroake, from the north to the Eaſt. The courſes and diſtances from the one land to the other, in the common Paſcardes of theſe Fare-waters, are alſo made after ſuch Compaſſes, ſo that men with the ſame can ſaile there-unto without altering of the Compaſſes, or to make any other account there-upon.

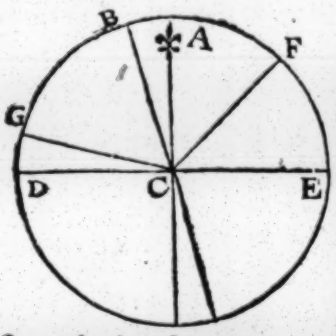
Upon farre Voyages over the great Sea, where the Needle turnes a ſtroake, two, or more, now to the weſt, and then to the Eaſt, it neceſſary to have a good care, and marke ſharpely there-upon, over what ſide, as how farre the ſame ſheweth from the north, for to be aſſured what courſe a man (ſailing) doth keepe.

For to finde the miſſe-ſhewing or turning off from the Needle, a man ſeeketh firſt the right north (for to make the Needles off-turning to agree therewith) upon ſeverall manners: Men meaſureth with a Compaſſe (whereoff the Needle with the lilly doth lye right over another) the Sun in the morning when ſhee riſeth, and in the evening when ſhee goeth under: If both theſe meaſurings fall even farre from the North to the ſouth, the Compaſſe of the Needle ſheweth then right north, without any turning off.

If the up-going be nearer to the north then the under-going, the turning of then is from the north to the eaſt, & a man hath northeaſtering.

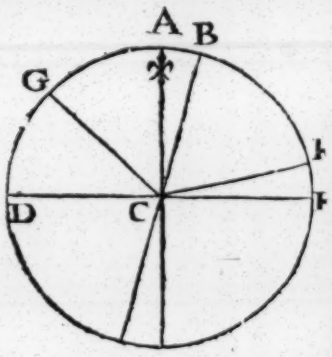
If the up-going be further from the north then the under-going, the turning-off is then from the north to the Weſt, and a man hath northweſtering.

I. Example.



Being the up-going of the Sunne on F, from E by north the eaſt 40, that is, from A the norther 50 degrees; the under-going on G, from D by north the weſt 10, that is from A the norther 80 degrees, the Bow G A F, doth then 130 degrees, theſe deviding in two, on B, ſuch that G B and B F every one doth 65 degrees, B is then the right North-poynt (in the middeſt betwixt the up and under-going) ſuch a Compaſſe ſheweth then from B to A 15 degrees to the eaſt. Or if from the leſſe meaſuring from the weſt D G be done 10 degrees, from the moſt from the eaſt E F 40, and the remaining 30 devideth in two, comes 15 B A north-eaſtering.

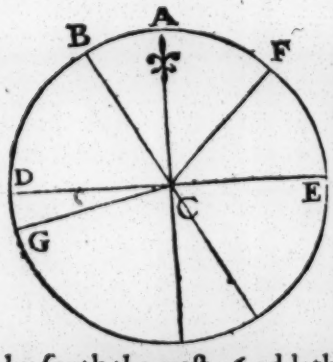
II. Example.



Let the up-going of the Sunne be on F 80 degrees, from the north to the eaſt, the undergoing on G 60 degrees to the weſt, the bow G A F doth then 140 degrees, theſe devideth in two on B, ſuch that G B and B F, every one doth 70 degrees, B is then the right north-poynt, 10 degrees by eaſt the Lilly, the Lilly or Needle ſheweth then 10 degrees from the right north to the weſt. Or if a man from the leſſeſt meaſuring drawes 10, from the moſt of the weſt 30, and devideth the remaining 20 in two, there comes 10 even on AB, the northweſtering of the Needle.

If the up-going falls by north the eaſt and the undergoing by ſouth the weſt, a man doth even upon the ſame faſhion to the ſouth, as in the former examples to the north is declared.

III. Example.



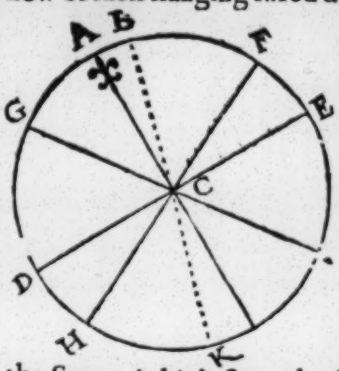
Taking F to be the up-going from E the eaſt diſtant 40, and from A north 50 degrees, G the undergoing, from D the weſt to the ſouth 16 or from the north A 106 degrees, the Bow G D A F is then 156 degrees, theſe deviding on two, as before on B, ſuch that G B and B F every one doth 78 degrees, B ſhal be the right northpoint 28 degrees by weſt the Needle, the ſame ſheweth then 28 degrees from the north to the eaſt. Or if a man the leſſeſt meaſuring by ſouth the weſt 16, addeth with the moſt meaſuring by north the eaſt 40, and doth devide ſuch number in two, there comes 28 even on the north-eaſtering of the Needle.

Out of the former Examples is enough to be underſtood all other thinghs, which in the meaſuring of the up and under-going of the Sunne a man might meete.

When it happeneth that a man can not ſee the Sunne in the up and undergoing, through the thickneſſe of the Clouds, hee may then meaſure the ſame in the fore and after-noon upon one ſelfe-ſame height, and doe as before.

IV. Example.

Foure or five houres in the fore-noone (the nearer the up-going the beter) I take with a degree-bow or Aſtrolabium the height of the Sunne above the Horiſon 10 degrees and meaſure alſo the Sunne with a ſhewing Inſtrument over the compaſſe, or with an hanging thred, and finde the ſhadow of the tred on G, 40 degrees from the north to the weſt, ſuch that I C G muſt be taken for the ſhadow, I note that per memory, and ſtaye till after noone that the Sunne is gone downe againe upon the ſame height (as before) of 10 degrees, and I looke then where the ſhadow of ſuch hanging thred doth ſhew, the which is (as I take it) on F 60 degr. from A north, ſuch that H C E portrayes the ſhadow. The bow G A F 100 degrees, devided in two alike parts on B, ſo that G B and B F every one doth 50 degrees, the point B is the right north-point, the needle then turneth from the north of B unto A, to the weſt, 10 degrees, and alſo in all other occaſions.

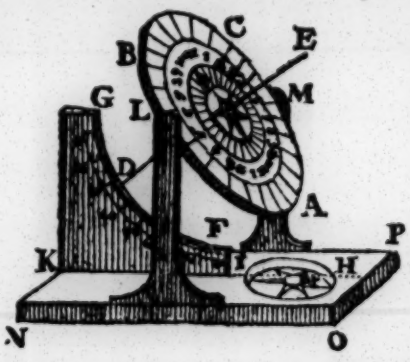


After ſuch a manner may a man in the forenoone meaſure, two, three, foure, or more, as by Example: The firſt, when the Sunne is high five, the ſecond, eight, or ten, the third, twelve, fifteen or more, and in the after-noone againe upon the like heights, then a man doth finde how the one agreeth with to other, and when a man alwayes findes a ſelfeſame north poynt, he is then ſo much more aſſured of his perfect meaſuring. This is hereby to be noted: how a man doth ſuch meaſuring further from the mid-day and nearer on the up-going and under-going of the Sunne, the more certaine it is, and the more there-upon may be truſted, by reaſon, becauſe the Sunne comming cloſe by the mid-day, doth but change little in height, not withſtanding turneth a great deale upon the Compaſſe.

Of the Tides.

IT is knowne to al experienced Mariners that the ebbing and flowing of the ſea is governed by the Moone, alſo that at every new and full Moone the waters are higher, which they call ſpring-tydes, and at the quarter of the Moon the waters are loweſt: ſo that you may know and that certainly by former obſervation, (although the turne and real cauſe thereof is yet hidded from us) the houre of the tyde, and on what poynt or ſtroke the Moone maketh high water in any particular place, to the great profit and furtherance of navigation.

To know on what ſtroke the Moone is, it may be done in a two fold manner, by the ſight or by marking how old the Moone is; to looke at ſome ſtroke of the Compaſſe, may not be done according to the common Compaſſe lying flatte or driving water Compaſſe, becauſe the Horizon divideth only into equall ſtrokes, and ſheweth in what virtical Circle or Azimuth the Sun or Moone ſtandeth, but by a Compaſſe that (being lifted up) according to the Superficiall part of the Equinoctiall, devideth the Equinoctiall into equall parts, as the common flatte driving doth the Horizon, ſuch an Equinoctiall compaſſe is made in this manner as you ſee in this figure: where the roundell A B C ſheweth the flatte of the Equinoctiall, the gnomen E D the axeltree of the World. The foreſaid rondel in B marked on both ſides, in the inſide with the Compaſſe, and on the edge of the outſide, with twice 24 hour, and in the eaſt and weſt at L and M hanging on two pinnes as it were on an axeltree, ſo that theſe being turned up and downe, and the gnomen ſet & the nether end by D and by the Quadrant F D G, that you may place in at the height of any pole.



If you ſet ſuch a compaſſe with the bottom water compaſſe, the line H K juſt north and ſouth, to wit, H to the north and K to the ſouth, and the lower end of the gnomen by ſuch a degree of the Quadrant F C, according to the height of the Pole where you are: there will the rondell A B C, ſtand even with the ſurface of the true Equinoctiall, and the gnomen E D with the axeltree of the World.

The ſight on ſuch a Compaſſe, and a common one, differeth very much, and by how much nearer the Equinoctiall ſo much more will the difference be, as will appeare by this example following.

1 Example.

On the height of 50 gr. or thereabout, the Sunne being in the beginning of Cancer in the greateſt northerly declination, it is ons a common Compaſſe eaſt at halfe and houre paſt ſeven, and weſt at halfe an houre paſt foure, that is he goeth from the eaſt to the weſt through the ſouth in nine houres, but from the weſt through the north to the eaſt in 15 houres.

2 Example.

At the height of 30 degrees, he comes litle before halfe an houre paſt nine at the eaſt, and a little after halfe an houre paſt two to the weſt, and

ſo it

ſo it goeth in leſſe then five houres and a halfe from the eaſt through the ſouth into the weſt, but from the weſt through the north to the eaſt he goeth more then 11 houres.

3 Example.

The Dragonſhead being in the beginning of Aries, and the Moone in the beginning of Cancer, they make 5 degr. more Declination than the Sun, & go to the foreſayd height of 30 degrees more then an houre ſoonner from the eaſt to the weſt, then the Sun, to wit, about the ſpace of 4 houres, & againe from the weſt to the eaſt about the ſpace of 2 houres.

Under the line, the Sun having no Declination, riſeth in the morning in the eaſt, and riſing remaineth eaſt untill he commeth to the Zenith, and paſſeth that to the weſt, and abideth ſo deſcending weſt, till he approacheth the Horizon and is according to a flatte driving compaſſe, the one halfe of the day eaſt, and the other weſt, without comming no any other ſtroke, but it is not ſo on ſuch an Equinoctiall compaſſe. The Sunne and Moone both going alwayes in the ſame diſtance of tyme over every ſtroke, to wit, from the eaſt to the S. in ſix houres, and from the S. to the weſt in ſix houres, and againe from the weſt through the north in twice ſix houres.

Example.

Under the line, the Sun being in the Equinoctiall, I ſet the end off the gnomen E directly north, the other end D to the ſouth at the upper-edge of the Quadrant at G ou O, the gnomen E D ſhall lye water Compaſſe, like the axeltree of the world, and the roundell right in the lead upright like the true Equinoctiall there. The Sun comming above the Horizon, the ſhaddow of the gnomen ſhall direct you to the ſixt houre in the eaſt, for the riſing, but if hee riſe beyond the edge of the roundell, and devideth that in the ſame time into equall parts with the ſhaddow, being 45 graden above the Horizon, the ſhadow of the gnomen will direct you to the 9 houre in the ſouth, being come into the Zenith, the ſhaddow ſhall fall juſt on the lead at the twelfe houre in the ſouth, againe 45 graden, that is deſcending halfe way the weſt, the ſhaddow ſhal be at the third houre in the afternoone in the ſouthweſt, but coming to the Horizon the ſhaddow ſhall fall on the ſixt houre in the weſt.

As this is ſpoken of the Sun, the ſame muſt be underſtood of the moon in as much as concerneth the points or ſtrokes of the Compaſſe.

To reckon by the age of the moone, we have ſet in the table following under every ſtroke two rankes of ciphers, the firſt are the dayes of the age of the moone, or the dayes paſt ſince the moone was new or at the full. The ſecond the houres and minutes of thoſe dayes, in the which the moone comes to ſuch a ſtroke, and maketh at the place ſtanding by high water.

Example.

Eight dayes after the moon hath beene new or at the full, I deſire to know when the moone commeth to the ſouth, or at Embden, Enckhuyſen, and ſuch like places, maks high water (for there a north and a ſouth moone makes full ſea) I ſeek under the north and ſouth ſtroke the 8 day in the 1 columne, and by that in the ſecond 6 houres 24 minutes on that then ſhall the moone come to the north and ſouth at 6 houres 24 minut. and make high water in that place.

The tyde 48 minutes later every day, that is foure or five parts of an houre, then if you know at what houre the new or full moone make high water in any one place, you ſhall reckon from that firſt day every day foure or five parts of an houre later, and ſo you ſhall find the juſt time of high water or full ſea in that place.

Example.

When the moone is new or full, then it is at Amſterdam and Rotterdam (and whereſoever a ſouthweſt and northeaſt moone maketh full ſea) high water at three of the clocke, a day after the new or full moone at three of the clocke 24 minutes, two dayes after at foure of the clocke and 36 minutes, and foure dayes after the new or full moon at ſix of the clocke 12 minutes.

Here follow the Table of the Water tydes.

VVeſt and by North, and Eaſt and by South.

da.	ho.	mi.		
0	12	0	At the Iuttish Ilands	Falling of ſtreams upon the ſame ſtroke.
1	12	48	Before the Hever, Eyder, and	
2	1	36	Flve. Before Emden and Delfezie. Before Enckhuyſen, Horn	
3	2	24	and Urck, upon all the coaſts	
4	3	12	of Flanders. upon the fore-	
5	4	0	land. At Doever in the Bier.	
6	4	48	at Beveſier on the ſand. at	From the Neſſe to Beunen.
7	5	36	Hanton on the Kay. Before	
8	6	24	Schietenburgh and the Ras of	
9	7	12	Blanckert.	
10	8	0	at Oiſernes.	
11	8	48	in the Conduit	
12	9	36	at Iubleter in the Road.	
13	10	24		
14	11	12		
15	12	0		

VVeſtnorthweſt, and Eaſtſoutheaſt.

da.	ho	mi.		
0	1	30	Under the Holy Land	Falling of ſtreames upon the ſame ſtroke
1	2	18	Before the Maſe and Goeree,	
2	3	6	Before the Veere	
3	3	54	at Armewe. Upon the flat	
4	4	42	before Rammekens. Before	
5	5	30	the VVielings. On the Sea-	
6	6	18	land Coaſts. Before the	From the Gravelinghen to beunen.
7	7	6	Thames of London	
8	7	54	Before Yarmouth	
9	8	42	In Duyns on the Road	
10	9	30	Neare the Cingle	
11	0	18	On the weſter end of VVight	
12	11	6	without Callice and Swart-	
13	11	54	nes. In Blavet	
14	12	42	Bulline at the Land.	
15	13	30		

North weſt by weſt, and Southeaſt by Eaſt

da.	ho	mi		
0	12	45	VVithin the Maſe	Falling of ſtreames upon the ſame ſtroke
1	1	33	within the Veer	
2	2	21	at Flushing	
3	3	9	Neare Beveſier in Sea	
4	3	57	In the Chamber	
5	4	45	In Charmſey	
6	5	33		
7	6	21		From Beunen to the Som. Alſo from Eſtables to Beunen.
8	7	9		
9	7	57		
10	8	45		
11	9	33		
12	10	21		
13	11	9		
14	11	57		
15	12	45		

Northweſt, and Southweſt

da	ho	mi		
0	2	15	VVithout Fontenay	Falling of ſtreames upon the ſame ſtroke,
1	3	3	VVithout Blavet	
2	3	51	Under Bulline	
3	4	39	before the wieling	
4	5	27	before the Maſe.	
5	6	15		
6	7	3		Amidſt through the Heads From Dunkerck to Greveling From Staples to Fecam From dortmont to Exmouth.
7	7	51		
8	8	39		
9	9	27		
10	10	15		
11	11	3		
12	11	51		
13	12	39		
14	1	27		
15	2	15		

Northweſt by north, and Southeaſt by South

da	ho	mi		
0	3	0	At Amſterdam, Rotterdam,	Falling of ſtreames upon the ſame ſtrok
1	3	48	Dort and Zierickſea, before	
2	4	36	Newcaſtle, the Thete, & Hare	From Ca, de Hague to the Ilād of Ornay, From Gainzey to Caquet, from Mylford to Ramſey At Fawike in the channel, At Portlād in the Sack
3	5	24	poole. In Rochelhoods bay,	
4	6	12	without the Flemis banckes	
5	7	0	In the pas of Calice, before	
6	7	48	Conquet, at pen marques groy	
7	8	36	Armentiers, his Kiliaets,	
8	9	24	porthus, the river of Burdeux	
9	0	12	On al the ſouthcoaſts of Bri-	
10	11	0	tagne, Gaſcoigne, Portia, On	
11	11	48	al coaſts of Biſcaye, Galiſſien	
12	12	46	Portugale and Spanie, On the	
13	1	24	weſt coaſts of Ireland, at Bo-	
14	2	12	kenes or Orkeneſſe, In Hit-	
15	3	0	land and Fairhill.	

Northnorthweſt, and Southſoutheaſt

da	ho	mi.		
0	3	45	between the pas of Galice and	Falling of ſtreames upon the ſame ſtrok
1	4	33	the Maſe, at Roan. In the Sor-	
2	4	21	lis, before S. Matthews Poynt	
3	5	9	In Briſtow and Crixdow, In	
4	6	57	the forde betweene Heyſant.	
5	6	45	before the Boas, at S. Marten,	From Struſaert ſo Deepe, From Lezard to Start, From Ca, de Clare to London,
6	7	33	before Rochel before Brou-	
7	8	21	wage, at Roan, In the river	
8	9	9	of Bourdeaux within the cha-	
9	10	57	nels ſituated on the coaſts of	
10	11	45	Spain, Galiſſien, the ſouthſide	
11	12	33	of Bretaigne, Gaſcoigne, and	
12	1	21	the weſt coaſts of Irelant	
13	2	9		
14	2	57		
15	3	45		

VVeſtſouthweſt, and Eaſtnortheaſt

da	ho.	mi		
0	4	30	From Texel to the pas of Ca-	Falling of ſtreams upon the ſame ſtroke.
1	5	18	lice in the farreway, before	
2	6	6	Humber, before Flambrough	From Offend S. Catelines, from Berchfleur to Struſaert the Breeſand our and in, From C, de Cleare to the Hand Saltees, between London and Holmes ſo far as Briſtow, From Sorlis to Englands end, From Start point to Portland
3	6	54	and Schetenboroug Abruac.	
4	7	42	In Famouth, in the Mouſcho-	
5	8	30	le, Seven Ilands, S. Pauls with-	
6	9	18	out the haven betweene garn-	
7	10	6	ſey and the ſeven Iſles in the	
8	10	54	farrewater. In the Breeſand,	
9	11	42	without the foure. All ſouth	
10	12	30	coaſts of Ireland, as Kinſael,	
11	1	18	Corckelochel, VVaterford, &	
12	2	6	Cape de Cleare,	
13	2	54		
14	3	42		
15	4	30		

VVeſt by ſouth, and eaſt by north,

da	ho	mi		
0	51	15	In Torbay and Dartmouth,	Falling of Streames upon the ſame ſtrok
1	6	3	in Flymmouth and Fawyke,	
2	6	51	in the Sea of Galles	From Iſle Bas to the Foure, From Dorſey to C. de Cleare, From the Sorlis to Lizard, Frō portlant to VVight, Frō wight to Beach, or beveſier
3	7	39	in Famouth,	
4	8	27	in Milford,	
5	9	15	At Ramſey in VVales.	
6	10	3	before Lin in Engeland	
7	10	51	againſt London,	
8	11	39	In all havens on the South	
9	12	27	coaſt of Irelandt.	
10	1	15		
11	2	3		
12	2	51		
13	3	39		
14	4	27		
15	5	15		

West and East

da	ho	mi		
0	6	0	before Hambourg,	Falling of Streames upon the ſame Strok
1	6	48	before Bremen,	
2	7	36	before Marſdeep or Texel,	
3	8	24	at Hull,	
4	9	12	at Blackney and VVels,	
5	10	0	before Antwerpe,	
6	10	48	Tergoes,	
7	11	36	Tergouwe,	
8	12	24	at Goncallo and S. Malo,	From the Kiſcaſſes to Berchfleur, From Englands end to Lizard,
9	1	12	S. Pauls in the haven,	
10	2	0	VVithout the Sorlis in the	
11	2	48	channell.	
12	3	36		
13	4	24		
14	5	12		
15	6	0		

VVest and by North, and East and by South.

da	ho	mi		
0	6	45	Betweene Fawick and Famouth in the channell,	Falling of streames upon the same stroke
1	7	33	A middest in the channell,	
2	8	21	At Brissow, at the Key.	
3	9	9	Before S. Nicolaes and Podesseuske,	
4	9	57		
5	10	45		
6	11	33		
7	12	21		
8	1	9		From the Iland Pas to Marwanen along land.
9	1	57		
10	2	45		
11	3	33		
12	4	21		
13	5	9		
14	5	57		
15	6	45		

VVestnorthwest, and Eastsoutheast,

da	ho	mi		
0	7	30	At the Nesse by Wieringhen, in Texel in the Copevaerders Rode.	Falling of streames upon the same stroke,
1	8	18		
2	9	6		
3	9	54	At Kilduyn,	
4	10	42	In the middle of the channell in the Fatreway.	
5	11	30		
6	12	18	Neare Goutstert in the channell,	From the Iland, Briack to S. Malo From Bergsieur, to Seynhooft.
7	1	6		
8	1	54	And between Mousehole and Famouth in the Sea,	
9	2	42		
10	3	30	Neare Plymmouth in the Sea	
11	4	18	At Lezart by the Land.	
12	5	6		
13	5	54		
14	6	42		
15	7	30		

Northwest by west, and Southeast by East.

da	ho	mi		
0	8	15	Without the Kiscasses in the channell.	Falling of streames upon the same strok,
1	9	3		
2	9	51	By VVight in the channell.	
3	10	39	From VVight to Bevisier by the Land.	
4	11	27		
5	12	15	Upon the VVestcoast of the Foreland,	Behinde Garnsey in the fare-water. within the seven Iland,
6	1	3		
7	1	51	VVithout the Flye.	
8	2	39		
9	3	27		
10	4	15		
11	5	3		
12	5	51		
13	6	39		
14	7	27		
15	8	15		

Northwest, and Southeast.

da	ho	mi		
0	9	0	Before the East and west Eemses,	Falling of Streames upon the same stroke.
1	9	48		
2	10	36	Before the Flye.	
3	11	24	Before the Scholbalgh,	
4	12	12	On all the Freese coasts,	
5	1	0	Upon the Freese and VVieringer Flack.	
6	1	48		
7	2	36	Before Crammer winterduyn and Yarmouth.	In the wyke of Benyre. Betweene Morliax and the Treacle pots.
8	3	24		
9	4	12	VVithin the Seyne.	
10	5	0	At the east end of VVight,	
11	5	48	In the Rasse of Portland.	
12	6	36	Betweene Garnsey and the Kiscasses.	
13	7	24		
14	8	12		
15	9	0		

Northwest by north, and Southeast by south.

da	ho	mi		
0	0	45	The Needles of wight.	Falling of Streames upon the same strok
1	10	33	In the channell by wight.	
2	11	21	The Kiscasses.	
3	12	9	At Garnsey in the channell	
4	12	57	Neare Leytlaff and Yarmouth without the banks.	
5	1	45		
6	2	33	At Tergouwe,	Before Concallo, before the Iland of S. Michael in the Greeke.
7	3	21	At the wolfs-horne.	
8	4	9		
9	4	57		
10	5	45		
11	6	33		
12	7	21		
13	8	9		
14	8	57		
15	9	45		

Northnorthwest and Southsoutheast,

da	ho	mi		
0	10	30	At Olfersnes and Hardwig without the banks.	Falling of streames upon the same strok.
1	11	18		
2	12	6	At Leytlaff in the Rode,	
3	12	54	Yarmouth in the Road.	
4	1	42	Before the Thames of London	
5	2	30	At Margat.	
6	3	18	At VVight within.	
7	4	6	At Beunen Deepe and Seyn hooft,	From Bergsieur to Athonia. From C. Dosi to the Iland Dardan.
8	4	54		
9	5	42	In the Bosse of Caen	
10	6	30	At Struysiert, and al the coasts of Normandy and Piccardy.	
11	7	18		
12	8	6		
13	8	54	At S. Helena and Calveroort.	
14	9	42		
15	10	30		

VVestsouthwest and Eastnortheast

da	ho	mi		
0	11	15	Between Cripplesand and the Kreyl.	Falling of Streames upon the same Stroke.
1	12	3		
2	12	51	VVithin at Olfersnes.	
3	1	39	As Hampton.	
4	2	27	At Porchmouth, and at wolfers horne.	
5	2	15		
6	3	3	At Calveroort in wight.	
7	4	51	Before the haven of Caen.	From S. Matthews point unto Backovens From Fontenay to S. Matthewes poynt.
8	5	39	VVithin, the Thames of London.	
9	6	27		
10	7	15		
11	8	3		
12	8	51		
13	9	39		
14	10	27		
15	11	15		

How to finde the age of the moone.

TO doe this without an Almanach, you must know the Epact or Key of the yeare, and that you shall finde by the Golden number, and the Golden number thus: looke how many yeare there are past from that yeare of our Lord, 1500 and these devide by 19 and what remains is the Golden number of that yeare, if there remaine nothing, the Golden number is 19.

Example.

I desire to know the Golden number of the year 1645, setting the 1500 a side, I devide the 145 yeares wit 19, I find seven times, and the remainder is 12. Then the Golden number of the yeare 1645 is 12.

The Golden number increaseth every yeare with the beginning of the yeare with one, as in the yeare 1640, it is 8, 1641 it is 9, and so forth to 19, after that againe 1, 2, 3, &c. The Epact changeth every yeare on the first of March increasing with 11 to 30, but being more then 30, you must leave that 30 and the remainder is the Epact. You shall finde it by the Golden number on the 3 joynts of your thumme, beginning with one at the lower joynts, unto the Golden number of your yeare proposed, doth end this kind of telling at the lower joynt, and then the Epact and the Golden number are all one: but if it end on the second joynt, adde 10, if on the third joynt, adde 20 by the same Golden number, that number is the Epact of that yeare.

Example.

I desire to know the Epact of the yeare 1645, the Golden number is 12, telling on the joynts of the thumme, beginning with one at the lower joynt, the telling endeth with 12 on the highest joynt, adding 20 to 12, you shall have 32 substract 30, there remaines 2 for the Epact of that yeare.

After the old stile, the Golden number is the selfesame with the new stile, but the Epact is 10 more, therefore if you adde 10 to the Epact of the new stile, you shall have the Epact of the old stile, as for the yeare 1645, 10 to 12, (the Epact of the new stile) comes 22, this is the Epact of that yeare according to the old, stile.

But to find the Epact without telling, is the Golden number to know buth according to the old and new stile, looke on this Table following, where they are set the one by the other.

Golden Number.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
New Epact.	1	12	23	4	15	26	7	18	29	10	21	2	13	24	5	16	27	8	19
Old Epact.	11	22	3	14	25	6	17	28	9	20	1	12	23	4	15	26	7	18	29

A
G B
F C
E D

The Epact being knowne, you shall adde it to the number of the moneths that are past from March to the moneth you are in, the same moneth being reckoned with it, if this brings forth 30, then it is new moon the first day of the same moneth, but as much as it is lesse then 30 so many dayes you have to the new Moone.

Example.

In the yeare 1641, I desire to know when the Moone shall bee new in in the mooneth August, the Epact of that is 18, adding to this 6 for the number of the moneths since March) the moneth of August being included) it makes 24, there want 6 to make it 30, therefore, the moone shall be now 6 dayes at this, that is the 6 of August.

The Epact, the number of the moneth past from March and the day of the moneth being added, such a number, (or what soever it brings forth, more then 30) it sheweth the age of the moone.

I. Example.

To know the age of the moon on the 12 of August 1645. I adde the Epact 2 to 6, the months past, & 12 for the 12 dayes, they make this 20, is the age of the moone, but this is to bee understood after the new stile.

To finde out easily without casting up the time the new moon, we have here adjoyned an Almanach for 10 yeares next ensuing, calculated by the meridian of Amsterdam, shewing the day and houre of every new and full moone, together with the quarters, the use of it is thus: by the moone in every moneth there are two columnes of ciphers, the first sheweth the day of the moneth, the second the houres and minutes of and full Moone, to reckon from the noone of the same day following, to the use and custome of Astronomers.

Example.

I would know in the yeare 1625, in the moneth of Iuly, on what day and houre the moone will bee new, and I finde the new Moone, on the 5 day, 18 houres, 31 min. telling from noone tyde, and this runne to the next day in the morning at 6 of the clock.

To know what day of the weeke that will bee, you must first know the Dominicall letter of that yeare, and with what letter each moneth beginneth, the Sundayes letter you shall find under the Almanach of each, the leap-yeare hath two, the first you shall use to the 24 of February, the other to the end of the yeare, every moneth beginneth with such a letter as this table following sheweth.

Ianuary, February, March	begin with	A, D, D	April, May, Iune	begin with	G, B, E
July, August, September	begin with	G, C, F	October, November, December	begin with	A, B, E

For as much as Iuly beginneth with a G you shall begin to tell at ground

ground to 5, and that fall out in E, that is the third day after B, the Dominicall letter of that yeare, and so it will bee wednesday, and so in al the other. In the Leape yeare you must tel both the 24 and 25 on F, because the 25 day and 24 were added on F.

Of the CARDE.

IT is knowne to every man, especially to those that understand the grounds of Cosmographie, that the earth with the waters make one complete round body, and therefore it can not be, that you should set forth the same perfectly in a plane or Carde, either in the hole or in part, but there will be some want, for it is unpossible to make a plaine agree with a round forme in all the parts thereof. So that your common cardes many times fayle in truth, especially those that comprehend great and long voyages by sea, and far from the Equinoctiall; but the Maps which are commonly used in this Countrey, of the Easterly and Westerly Navigation, are without fault, or at least the errors are so little that they hinder not.

They are very fit Instruments to be used at sea, and our forefathers, which have invented them, have brought no small profit and utility to Mariners. The fault of them consist in this, and thus it may be seene: If you would sayle a triangle, the 2 first sides will bee sailed on their strokes, and distances, but from the 2 to the 3 place (that is the 3 side of the triangle) it will sayle both on the strokes and distances.

Example.

I sayle from the Lizard a straight course to the Ilands of Canary, and from thence againe to the Ilands of Corvo and Flores, on which foresayd stroks, and distances many Maps, are very complete and perfect. But if I would sayle againe from Corvo to the Lizard, from whence I first sailed, the Card will shew me an imperfect way, to wit, it will seeme farther wide in the Card, then indeed it is, also it will differ on the points of the Compasse: so that you must direct your course more northerly then that which your Card directeth.

In so short a yourney, as this above sayd, it is not much observed, neither it is worth the observation: but those that sail to the West-Indies, shall soone perseive it; when they set sayle, they take their course far to the south, and there they finde their Cards of a fit length because the Cards are fitted to it; But in their returne, when they take their course northward, they finde the way much shorter then their Cardes shew them.

This is the cause: Al the Lines in the Card from north and south are drawne every where at an equall distance each from other, from the Equinoctiall to the Pole; but on a globe which is made round like the earth, they are not of an equall distance, but the more northerly they come, so much the nearer they come each to other. So that two strokes from north to south at the latitude of 60 degrees, are but halfe so wide from one another, as they are at the Equinoctiall, and at the Pole they each other. Therefore two shipps being under the Equinoctiall distant from one another two hundred leagues, they may both sayle directly north without hinderance, comming to the height of 60 degrees but being 100 leagues from each other, and that following the same course, they would in the end meet each other under the Pole, but if you direct such two ships by a plaine Carde, they will be alway at equall distance, by which it sufficiedtly appeales, that al places lying far north, are much to wide, unlesse they be drawne in, which can not be done, but you must make other places more faultly.

Of the Sunnes Cyclo, also Cyclo Indictionali or Romish Indiction.

BY the Cyclus of the Sunne is to be understood 28 years, in which time the Sundayes Letter turneth againe at his beginning. If you wil know the Cyclum of the Sunne (untruely called the Circle of the Sunne) for the year 1643, adde then 9 to the same number because Christ is borne in the tenth yeare of the Cycli; Devide that number with 28, then you finde in the quotient how many times the Cyclus is turned since Christ was borne, and that there remaineth is the Cyclus of the yeare.

Example.

If you desire to know the Cyclum of the Sunne from the yeare 1643, adde 9 thereto, then, comes 1652, devide that with 28 then comes in the quotient 59, how many times the Cyclus is turned over since Christ was borne, because there remaineth nothing, so is the Sunnes Cyclus for the yeare 1643.

The Roman Indiction is ordered by the Romans, at that time when they had brought the whole World under their command, it is a number of 15 yeares, which they did devide in 3 Lustra.

In the first Lustra or 5 yeares did they gather gold for the enriching of the Empecour.

In the second Lustra did they gather Silver, for the payement of the Souldiers.

In the third, did they gather Iron and Steele, for reparation of her Armes. He that desire to know more here-off, may read *Tit. Liv. Lib.* 1.

The Roman Indiction beginneth alwayes upon the first day of Sept.

For to know yearly the how manieft indiction it is, adde then 3 unto the date of our desired yeare, for men doth hold, that Christ is borne in the third yeare *Indictionis*, devide that number with 13, that which remaineth is the Indiction for that yeare; If there remaineth nothing then is the Indiction 15. The quotient sheweth how many times the Indiction is turned over.

Example.

I desire to know the Indiction of Anno 1644. I adde 3 thereunto, comes 1647. I devide that with 15; then comes in the quotient 10,9, and there remaineth 12 that is the Roman Indiction for that yeare.

Almanach for the Yeare 1649, New-stile.

	Moon.	da	ho	mi
January.	last quart.	5	4	22
	new moon	12	12	45
	first quart.	20	8	30
	full moon	28	1	50
Febru.	last quart.	3	20	52
	new moon	11	2	48
	first quart.	19	5	40
	full moon	26	13	39
March.	last quart.	5	5	34
	new moon	12	19	0
	first quart.	20	23	52
	full moon.	27	23	14
April.	last quart.	3	15	16
	new moon	11	11	52
	first quart.	19	13	20
	full moon.	26	7	28
Maius.	last quart.	3	2	20
	new moon	11	4	12
	first quart.	19	0	3
	full moon	25	15	0
Iune.	last quart.	1	15	33
	new moon	9	19	20
	first quart.	17	7	10
	full moon.	23	22	34

	Moon.	da	ho	mi
July.	last quart.	1	6	27
	new moon	9	8	44
	first quart.	16	12	40
	full moon	23	7	52
August.	last quart.	30	23	34
	new moon	7	20	18
	first quart.	14	17	54
	full moon.	21	18	46
Septemb.	last quart.	29	17	56
	new moon	6	6	32
	first quart.	12	23	56
	full moon	20	7	50
Octob.	last quart.	28	12	0
	new moon	5	16	14
	first quart.	12	8	15
	full moon.	20	0	10
Novem.	last quart.	28	4	41
	new moon	4	2	2
	first quart.	10	19	0
	full moon	18	19	0
Decemb.	last quart.	26	19	10
	new moon	3	12	21
	first quart	10	9	42
	full moon.	18	14	31
	last quart.	26	7	12

The Golden num. off this year is 16 the Epact 16 Roman Indiction 2 Sunday letter. C, the after-winter 7 w. 2 da. Quadrages, the 21 of Febr. Easterday the 4 of April, Ascen. 13 of May VVhitf. the 23 of May, Adven, the 28 of Nov. there will be 5 Eclipsis, 2 of the moon, 3 of the Sun, both of the Moon, and the middle of the sun shall be seen in our Horizon the 1 of the moon 26 May, 3 hour. and 36 min. the 1 off the Sun, 9 Iune, at the 19 hou. 57 min. the 3 of the Sun the 4 of Nov. 3 hou. 9 min. and shall be seen of us the 4 will bee of the moon the 19 of Nov. 7 hou. 24 min. the 3 of the Sun 4 Decemb. 12 hou 35 min. and it shew it selve in the sly parts of the world, under our Ho.

Almanach for the Yeare 1650, New-stile.

	Moone.	da	ho	mi
January.	new moon	1	23	0
	first quart.	9	4	0
	full moon	17	8	52
	last quart.	24	17	0
Febru.	new moon	31	11	12
	first quart.	8	0	58
	full moon	16	0	36
	last quart.	23	1	15
March.	new moon	1	23	58
	first quart.	9	22	9
	full moon	17	14	40
	last quart.	24	8	28
April.	new moon	31	13	56
	first quart.	8	17	18
	full moon.	15	23	52
	last quart.	20	15	30
Maius.	new moon	30	5	0
	first quart.	8	9	0
	full moon	15	8	15
	last quart.	22	23	24
Iune.	new moon	29	20	33
	first quart.	6	21	29
	full moon	13	15	30
	last quart.	20	9	54
	new moon	28	11	50

	Moone.	da	ho	mi
July.	first quart.	6	7	0
	full moon	12	22	21
	last quart	19	22	20
	new moon	28	2	28
August.	first quart.	4	14	33
	full moon	11	6	42
	last quart.	18	14	16
	new moon	26	16	0
	first quart.	2	20	56
Septem.	full moon	9	15	34
	last quart.	17	8	37
	new moon	25	4	46
	first quart.	2	3	4
Octob.	full moon	9	3	50
	last quart.	17	4	20
	new moon	24	16	52
	first quart.	31	10	12
Novem.	full moon	7	19	28
	last quart.	15	23	43
	new moon	23	4	17
	first quart.	29	19	32
Decemb.	full moon	7	13	46
	last quart.	15	17	26
	new moon	22	2	44
	first quart.	29	8	4

The Golden number is 17, the Epact 27, the Romane Indiction 3, the Sunday letter B, the after winter 9 weeks, 1 daye, Quadrages, the 6 March, Easter the 17 of April, Ascension the 26 of May, VVhitsunday the 5 of Iune Advent the 27 off Nov. 4 Eclipses, 2 off the Sun, 2 of the Moone, which may be both of them seen of us in the evening at 8 hour. 41 min. the 2 of the moone, the 8 of Nov. in the morning 7 hou. 28 minut. the of the Sun fal both under our Horizon the 1 will be seen in the southerly parts of America as in Peru, the other falleth on the east of our Horizon will be seene in India and Persia and that extra Gangem.

Almanach for the Yeare 1651. New stile.

	Moon.	da	ho	mi
January.	full moon	6	9	14
	last quart.	14	8	34
	new moon	21	1	24
	first quart.	27	23	40
Febru.	full moon	5	4	16
	last quart.	12	20	29
	new moon	19	11	47
	first quart.	26	18	0
March.	full moon	6	21	19
	last quart.	14	5	6
	new moon	20	22	35
	last quart.	28	13	18
April.	full moon	5	1	37
	last quart.	12	11	33
	new moon	19	10	22
	first quart.	27	8	0
Maius.	full moon	4	23	13
	last quart.	11	17	2
	new moon	18	23	7
	first quart.	27	1	14
Iune.	full moon	3	8	12
	last quart.	9	23	0
	new moon	17	12	54
	first quart.	25	16	56

	Moon	da	ho	mi
July.	full moon	2	15	38
	last quart	9	6	44
	new moon	17	3	26
	first quart.	25	4	48
August.	full moon	31	22	26
	last quart.	7	17	9
	new moon	15	18	46
	first quart.	23	15	0
Septemb.	full moon	30	5	50
	last quart.	6	6	45
	new moon	14	10	31
	first quart.	21	23	19
Octob.	full moon	28	14	57
	last quart.	5	23	43
	new moon	14	2	3
	first quart.	21	6	32
Novem.	full moon	28	2	19
	last quart.	4	19	40
	new moon	12	16	34
	first quart.	19	13	56
Decemb.	full moon	26	16	30
	last quart.	4	17	7
	new moon	12	5	38
	first quart.	18	22	32
	full moon.	26	9	8

The Golden number is 18, the Epact 8. the Romane Indiction 4, Sunday letter A, the after-winter 8 weeks. Lent the 26 Febr. Easter the 9 of April, Ascension the 11 of May, VVhitsunday the 28 of May, Advent the 3 off December 2 Eclipses of the Sun, but neither of both shall be seen in our Hemisphere 1 shall be the 19 off April, 10 hour. 41 minutes, and shall be seen in Califurnia, and in the westerne sea about the Tropick of Cancer, the 2 off the Sun the 14 of October, 2 houres 3 min, it wil be seen in some places off Africa about Cabo Verde, in Brasilia, and in the S. parts of America in Peru, that of the moon shall bee seene of none, the darkening being little.

Almanach

Almanach for the yeare 1652. New stile.

	moon.	da	ho	mi
Januar.	last quart.	3	13	50
	new moon	10	17	13
	first quart.	17	9	5
	full moon	25	3	31
Februar.	last quart	2	7	38
	new moon	9	13	38
	first quart.	15	21	37
	full moon	23	22	24
March.	last quart.	2	21	29
	new moon	9	13	18
	first quart.	16	11	13
	full moon	24	16	19
April.	last quart.	1	7	15
	new moon	7	22	38
	first quart.	15	4	25
	full moon.	23	7	50
Mayus	last quart.	30	14	9
	new moon	8	8	17
	first quart.	14	24	52
	full moon	22	20	32
Iune.	last quart.	29	19	28
	new moon	5	18	31
	first quart.	13	15	42
	full moon	21	6	36
July.	last quart.	28	0	39
	new moon	5	6	40
	first quart.	13	8	42
	full moon	20	15	3
August.	last quart.	27	6	36
	new moon	3	19	35
	first quart.	12	0	1
	full moon.	18	22	49
Septemb.	last quart.	25	14	41
	new moon	2	10	50
	first quart.	10	13	10
	full moon	17	6	53
Octob.	last quart.	24	1	48
	new moon	2	4	26
	first quart.	10	0	15
	full moon	16	15	56
Novemb.	last quart.	23	16	52
	new moon	31	22	3
	first quart.	8	9	48
	full moon	15	2	31
Decemb.	last quart.	22	12	1
	new moon	0	14	39
	first quart.	37	18	34
	full moon	14	15	7
	last quart.	22	9	55
	new moon	30	5	36

The Golden number of this yeare is 19 the Epact 19 Roman Indiction 5 Sunday-letters GF afterwinter fixe weeke 6 dayes. Quadrages. the 18 February. Easter the 31 of March. Ascension the 9 of May. White-Sunday the 19 of May. Advent the first Decemb. There shal be this yeare 4 Eclipsis, 2 in the Sunne and 2 in the Moone, the first in the moone the 25 March, in the morning at 3 a clocke. 42 minutes, the second in the moone the 17 September in the evening at 7 a clocke, 9 minutes. The first in the Sunne the 8 of April, in the morning at 10 a clocke the second in the Sunne the 2 Octob. in the evening at 5 a clocke, but shall not be seene in these Countraies.

Almanach for the yeare 1653 New stile.

	moon.	da	ho	mi
Januar.	first quart.	6	3	2
	full moon	13	4	51
	last quart.	21	8	1
	new moon	28	18	37
Februa.	first quart.	4	11	47
	full moon	11	22	31
	last quart.	20	3	33
	new moon	27	5	39
March.	first quart.	5	21	15
	full moon	13	16	23
	last quart.	21	19	21
	new moon	28	15	3
April.	first quart.	4	8	22
	full moon	12	9	50
	last quart.	20	7	9
	new moon	26	23	15
Mayus.	first quart.	3	21	23
	full moon	12	1	44
	last quart.	19	15	43
	new moon	26	7	4
Iune.	first quart.	2	12	40
	full moon	10	15	28
	last quart.	17	22	4
	new moon	24	15	22
July.	first quart.	2	5	32
	full moon.	10	3	19
	last quart.	17	3	4
	new moon	24	1	15
August.	first quart.	31	23	11
	full moon	8	13	43
	last quart.	15	8	7
	new moon	22	13	39
Septemb.	first quart.	30	16	26
	full moon	6	23	16
	last quart.	13	14	37
	new moon	21	4	42
Octob.	first quart.	29	8	39
	full moon	6	8	29
	last quart.	12	23	50
	new moon	20	22	5
Novem.	first quart.	28	23	26
	full moon	4	18	49
	last quart.	11	13	7
	new moon	19	16	39
Decemb.	first quart.	27	12	9
	full moon	4	3	75
	last quart.	11	6	24
	new moon	19	11	4
	first quart.	26	22	55

The Golden number of this yeare is 1. the Epact 1. Roman Indiction 6. Sundayes-letter B, afterwinter 8 weekes, 4 dayes; Quadrages the 2 of March Easter the 13 of April, Ascension the 22 of May, White-sunday the 1 of Iune, Advent the 30 of November. There shall be 4 Eclipses this yeare. 2 in the Sunne and 2 in the Moone; the first on the moone the 14 of March. in the morning at 3 a clocke, 44 minutes, after midnight; the second the 7 of Septemb. at moone. at 11 a clocke, 45 minutes; Both on the Sunne upon the other side of the Earth, without our Horizon.

Almanach for the yeare 1654 New stile.

	moon.	da	ho	mi
Januar.	full moon	2	14	51
	last quart.	10	2	50
	new moon	18	4	0
	first quart.	25	7	40
Februar.	full moon	1	4	14
	last quart.	9	0	17
	new moon	16	18	40
	first quart.	23	15	13
March.	full moon	2	18	46
	last quart.	10	20	28
	new moon	18	6	20
	first quart.	24	22	35
April.	full moon	1	10	20
	last quart.	9	14	18
	new moon	16	15	44
	first quart.	23	7	0
Mayus.	full moon	1	1	52
	last quart.	9	4	35
	new moon	15	23	24
	first quart.	22	17	8
Iune.	full moon	30	17	25
	last quart.	7	15	23
	new moon	14	6	38
	first quart.	21	8	21
July.	full moon.	29	8	5
	last quart.	6	23	27
	new moon	13	13	50
	first quart.	20	20	0
August.	full moon	28	22	9
	last quart.	5	5	19
	new moon	11	22	11
	first quart.	19	12	48
Septemb.	full moon	27	11	3
	last quart.	3	10	39
	new moon	10	9	17
	first quart.	18	7	18
Octob.	full moon	25	22	28
	last quart.	2	16	36
	new moon	9	23	16
	first quart.	18	2	30
Novemb.	full moon	25	9	19
	last quart.	1	1	4
	new moon	8	15	52
	first quart.	16	20	49
Decemb.	full moon	23	19	48
	last quart.	30	12	26
	new moon	8	11	39
	first quart	16	12	45
	full moon	23	6	12
	last quart	30	3	0

The Golden Number of this yeare is 2. the Epact 12. the Roman Indiction 7. Sundayes-letters D. afterterwinter 7. weekes, 3 dayes Quadrag. the 22 of Febr. Easter the 5 April, Ascension the 14 may. White sunday the 24 of May, Advent the 29 Novem. There shall be 4 Eclipses this yeare, 2 in the Sunne and 2 in the Moone; the first in Sunne the 17 of Febr. in the morning about 7 a clocke without our Horizon; the second in the moone the 3 of March, in the morning about 7 a clocke, shall somewhat be seene of us, the third in the Sunne, the 12 of Aug. in the morning at 10 a clocke; and the fourth in the moone the 27 of Augustus in the evening at 11 a clock shall both be seene by us.

Almanach for the yeare 1655. New-stile.

	moon.	da	ho	mi
Januar.	new moon	7	8	16
	first quart.	14	23	53
	full moon	21	10	42
	last quart.	28	22	31
Februar.	new moon	6	0	40
	first quart.	13	14	51
	full moon	20	3	16
	last quart.	27	16	2
March.	new moon	7	16	45
	first quart.	14	17	5
	full moon	21	16	2
	last quart.	28	12	14
April.	new moon	6	5	39
	first quart.	13	1	28
	full moon	20	5	9
	last quart.	27	7	17
Mayus.	new moon	5	16	0
	first quart.	12	8	4
	full moon	19	19	5
	last quart.	27	23	12
Iune.	new moon	6	3	44
	first quart.	13	2	0
	full moon	21	4	30
	last quart.	28	2	34
July.	new moon	3	6	49
	first quart.	10	0	20
	full moon	18	0	39
	last quart.	25	21	54
August.	new moon	1	13	44
	first quart.	8	12	30
	full moon	16	15	40
	last quart.	24	6	36
Septemb.	new moon	30	21	39
	first quart.	7	3	44
	full moon	15	5	57
	last quart.	22	11	49
Octob.	new moon	29	3	18
	first quart.	6	22	32
	full moon	14	20	46
	last quart.	21	20	48
Novemb.	new moon	28	20	15
	first quart.	5	19	12
	full moon	13	9	52
	last quart.	20	4	36
Decemb.	new moon	27	11	36
	first quart.	5	16	10
	full moon	12	21	50
	last quart.	19	14	6
	new moon	27	5	38

The Golden Number of this yeare is 3. the Epact 23 Roman Indiction 8. Sundayes-letter C. Afterwinter 6 weeks 2 dayes. Quadrag. the 14 Febru. Easter the 28 of March. Ascension the 6 of May. White-sunday the 16 of May. Advent the 28 November. There shall be 4 Eclipses this yeare, 2 in the Sunne and 2 in the moone, the first in the Sunne shall be seene of us the 6 of Feb. about one a clocke in the afternoon; the second in the moone, and the third in the Sunne doe fall without our Horizon; the fourth in the moone shall scarce be seene of any body, because the darknesse will be very little.

Almanath for the yeare 1656 New stile.

	moon	da	ho	mi
January.	first quart.	4	10	44
	full moon	11	8	49
	last quart.	18	1	47
	new moon	26	1	0
Februar.	first quart.	3	2	0
	full moon	9	20	22
	last quart.	16	16	2
	new moon	24	19	49
March.	first quart.	3	13	38
	full moon	10	4	43
	last quart.	17	8	33
	new moon	25	11	37
April.	first quart.	1	12	19
	full moon	8	15	4
	last quart.	16	3	10
	new moon	24	2	54
Mayus.	first quart.	1	4	44
	full moon	8	1	18
	last quart.	15	21	41
	new moon	23	14	8
Iune.	first quart.	30	9	50
	full moon	6	13	6
	last quart.	14	15	7
	new moon	21	23	31
July.	first quart.	28	15	20
	full moon	6	2	6
	last quart.	14	5	52
	new moon	21	11	0
August.	first quart.	27	22	9
	full moon	4	16	36
	last quart.	12	19	19
	new moon	19	14	23
Septemb.	first quart.	26	7	16
	full moon	3	8	31
	last quart.	11	6	25
	new moon	17	21	38
Octob.	first quart.	24	19	17
	full moon	3	1	1
	last quart.	11	16	22
	new moon	17	7	30
Novemb.	first quart.	24	14	51
	full moon	1	17	36
	last quart.	9	1	0
	new moon	15	19	0
Decemb.	first quart.	23	11	32
	full moon	1	9	8
	last quart.	8	8	47
	new moon	15	9	2
	first quart	22	9	15
	full moon	30	23	4

The Golden Number of this yeare is 4, the Epact 4, Roman Indiction 9, Sunday letters B A, afterwinter 9 weeks, one day, Quadrag. the 5 of March. Easter the 16 April, Ascension the 25 of May, Whitsunday the 4 of Iune. Advendt the 3 off December. This yeare 5 Eclipses, 3 in the Moone and 2 in the Sun the first in the Moon ths 11 of Ianua, in the evening at 8 clocke, 49 minut. the second in the Sun the 26 of Ianua, at 8 a clock in the afternoon; we shal see them both; the third in the moon the 6 off Iuly; the fourth in the Sun the 21 of Iuly, and the fift in the Moon the 31 Decemb; All three without our Horizon.

Almanach for the Yeare 1657 New-stile.

	Moon.	da	ho	mi
January.	last quart.	6	15	19
	new moon	14	1	35
	first quart.	22	5	34
	full moon	29	10	54
Februar.	last quart.	5	2	43
	new moon	12	9	34
	first quart.	20	23	51
	full moon	27	21	3
March.	last quart.	6	14	14
	new moon	14	13	47
	first quart.	22	14	2
	full moon.	29	5	16
April.	last quart.	5	2	57
	new moon	13	6	50
	first quart.	21	0	10
	full moon	27	15	40
Mayus.	last quart.	4	18	58
	new moon	12	21	51
	first quart.	20	6	56
	full moon	28	13	0
Iune.	last quart.	3	21	28
	new moon	11	11	39
	first quart.	18	12	11
	full moon.	25	9	1
July.	last quart.	3	4	29
	new moon	10	6	42
	first quart.	17	16	54
	full moon	24	20	1
August.	last quart.	1	21	35
	new moon	9	6	34
	first quart.	15	22	12
	full moon.	23	9	35
Septemb.	last quart.	31	13	54
	new moon	7	15	15
	first quart.	14	6	34
	full moon	22	1	39
Octob.	last quart.	30	4	42
	new moon	6	23	39
	first quart.	13	18	9
	full moon.	21	19	10
Novem.	last quart.	29	7	32
	new moon	5	10	2
	first quart.	12	9	23
	full moon	20	13	35
Decemb.	last quart.	28	4	28
	new moon	4	19	43
	first quart	12	3	58
	full moon.	20	6	59
	last quart.	27	13	14

The Golden num. off this year is 5 the Epact 15 Roman Indiction 10 Sunday letter. G. after-winter 6 w. 6 dayes Quadrages, the 18 Febr. Easterday the 1 April, Ascen. 10 May Whit-sunday the 20 May, Advent, the 2 December, 4 Eclipsis, 4 shall be seen this yeare, 2 on the Sunne, and 2 in the moon, the 2 on the Sunne shall not be seene of us, but the 2 in the Moone doe shew themselves above the Horizon; the first upon the 25 of Iune, in the evening at 9 a clock, and the second the 20 December, in the evening at 7 a clocke.

Almanach for the Yeare 1658, New-stile.

	Moone.	da	ho	mi
January.	new moon	3	9	3
	first quart.	11	1	25
	full moon	18	22	54
	last quart.	25	21	21
Februa.	new moon	1	22	54
	first quart.	9	23	12
	full moon	17	12	0
	last quart.	24	5	40
March.	new moon	3	14	39
	first quart.	11	19	5
	full moon	18	22	30
	last quart.	25	14	28
April.	new moon	2	6	48
	first quart.	10	11	13
	full moon.	17	3	47
	last quart.	24	15	34
	new moon	1	23	35

	Moone.	da	ho	mi
Mayus.	first quart.	9	23	20
	full moon	16	14	49
	last quart.	23	11	15
	new moon	31	15	1
Iune.	first quart.	8	7	40
	full moon	14	22	10
	last quart.	22	1	85
	new moon	30	5	0
July.	first quart.	7	14	1
	full moon	14	6	12
	last quart	21	17	59
	new moon	29	17	36
Augus.	first quart.	5	19	16
	full moon	12	16	3
	last quart.	20	9	44
	new moon	28	4	58

	Moone.	da	ho	mi
Septem.	first quart	4	1	4
	full moon	11	4	14
	last quart.	19	6	37
	new moon	26	15	28
Octob.	first quart.	3	7	58
	full moon	10	19	26
	last quart.	19	0	38
	new moon	26	1	22
Novem.	first quart.	1	17	24
	full moon	9	13	8
	last quart.	17	13	20
	new moon	24	11	19
Decemb.	first quart.	1	6	12
	full moon	9	6	52
	last quart.	17	4	12
	new moon	23	21	23
	first quart.	30	22	34

The Golden number is 6, the Epact 26, the Romane Indiction 11, the Sunday letter F, after winter 9 weekes, 5 daye, Quadrages. the 10 March, Easter the 21st of April Ascension the 30 May, Whitsunday the 5 of Iune, Advent the 1 Decemb. This yeare 4 Eclipses, 2 in the Sunne, and 2 in the Moone, the 1 in the Sunne the 1 of Iune in the morning at 3 a clocke; the second in the moone, the 14 Iune, in the morning at 10 a clocke 10 minutes; the third in the moone the 10 November; the fourth in the Sunne the 24 Novemb. in the evening about 11 a clocke, but none of the same shal beseene of us.

Almanach for the Yeare 1659. New-stile.

	Moone.	da	ho	mi
January.	full moon	8	3	13
	last quart.	15	18	33
	new moon	22	8	51
	first quart.	29	18	31
Februar.	full moon	6	20	46
	last quart.	13	1	57
	new moon	20	21	5
	first quart.	28	15	20
March.	full moon	8	11	20
	last quart.	15	9	17
	new moon	22	11	43
	last quart.	30	9	38
April.	full moon	6	22	55
	last quart.	13	16	11
	new moon	21	1	3
	first quart.	29	5	9
	full moon	6	7	0

	Moone.	da	ho	mi
Mayus.	last quart.	12	13	12
	new moon	20	16	1
	first quart.	28	19	26
	full moon	4	16	36
Iune.	last quart.	11	6	14
	new moon	19	7	3
	first quart.	27	4	18
	full moon	3	22	10
July.	last quart.	10	19	22
	new moon	18	22	44
	first quart.	26	15	20
	full moon	2	5	24
Augus.	last quart.	9	9	20
	new moon	17	12	18
	first quart.	24	21	26
	full moon	31	17	1

	Moone	da	ho	mi
Septemb.	last quart.	8	2	31
	new moon	16	2	1
	first quart.	23	4	0
	full moon	30	1	2
Octob.	last quart.	7	22	2
	new moon	15	14	53
	first quart.	22	10	58
	full moon	29	14	57
Novem.	last quart.	6	18	1
	new moon	14	2	45
	first quart.	20	19	1
	full moon	28	8	0
Decemb.	last quart.	6	13	9
	new moon	13	13	56
	first quart.	20	5	52
	full moon.	28	2	3

The Golden number of this yeare is 7, the Epact 7. the Romane Indiction 12. Sundayes letter E, After-winter 8 weeks, 4 dayes Quadrages. the 2 of March, Easter the 13 April, Ascension the 22 of May, Whitsunday the 1 of Iune, Advent the 30 November 4 Eclipses this year, 2 in the Sun, and 2 in the moon the first in the moon the 6 May, in the evening at 7 clock, whereof we shal but see the end; the second in the Sun the 21 May, is without our Horizon; the third in the moon the 30 of Oct. in the morning at 2 a clock, 57 minut. we shall see the same; the fourth in the Sun the 14 Novemb. whose beginning we shall espy by the going under, but those of America shall see them plainly,

The

Sorlingues

Lezard

Mounts Bay

Scilly

C O R

WAL-SEN GE LANT

Carmarthen

Cardiff

Newport

Milford

Bristow

Barnstable

Bedford

Hartland

De Naes

Naes Sandy

Barry I.

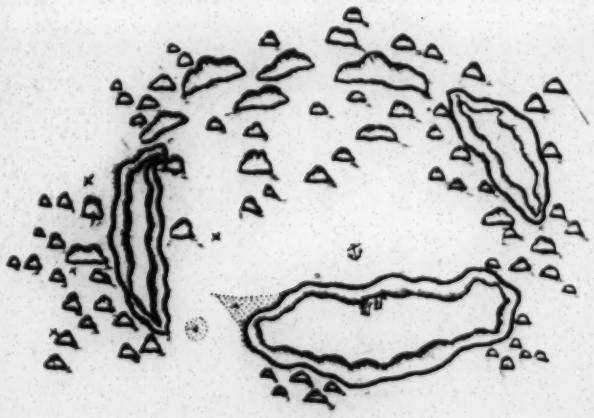
Penarth

Uphaven

Les Costes Marines
du Canal de Bruston.
A. Amstel p. Jacques Colom.

De Custe van Engelandt
van Lezard. tot Engelants
eynde de Sorlinges en
de Canaal van Bristou
Nieulycx beschreven by
Iacob Aertsz. Colom.

Duytsche mylen 15 voor een graadt Lieues d'Allemaigne 15 en un degre
Spaansche mylen 17½ voor een graadt Lieues d'Espaigne 17½ en un degre
Engel. en Fra. mylen 20 voor een graadt Lieues Angl. et Franc. 20 en un deg.



Sorlinges

I. Flores

I. Corvo

Fayal

I. S. George

I. del Pico

Graciosa

Tercera

S. Michiel

Abrolhos

S. Maria

Torceiras

Madera

Porto Santo

Salvages

Canarie

Lanzarote

Marocco

Barlingas

Portaport

Galliën

Lisbona

Portugal

Algarve

Sivilia

Granada

Biscaia

Navarre

Bordeaux

HISPANIEN

VRANCKRYCK

YSLAND

De Noordwest hoeck van Yslandt

ISLANDT

Walbus

Ian Mayen eylandt

SPITSBERGE

Beeren Eylandt

Noord Caap

Finm

arcken

LAPLANDT

Kandalex

Ombey

SCOTLAND

NOORWEGEN

SWEDEN

DENEMARCKEN

Oost vinlandt

RVSLANDT

Archangel

Pomeren

Coerlandt

Lyfflandt

LITTAVWEN

POLEN

Pascaarte
Nieulyx Beschreven
By
Iacob Colom
met Brivilege voor 18 Iaren

Duytsche mylen 15 in een graadt

Spaensche mylen 17½ in een graadt

Engel. en Fran. mylen 20 in een graadt

BRITISH
11 JU62
MUSEUM

The First ~~Booke,~~ Part

OF THE NEW,

FYRIE COLOMNE,

Of the WESTERN NAVIGATION.

THE FIRST ~~PART~~ Book

wherein the Descriptiön,

Of the

Zea-Coast of Hollandt, Zeelandt and Flaender, from Texel to the Heads.

Which is seth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very serving-able for all Mariners and Pilots.



BRITISH MUSEUM

Printed at Amsterdam,

By Iacob Columne, on the Water, in the Firie Columne.
Anno M. DC. XLIX.

ENGELANDT

NEDERLANDT

MEKLENBORGH

Londen

Hul

Yarmouth

Boston

Lincolne

Scarborough

Whitby

Dover

Sandwich

Calais

Dunkerk

Oostende

Sluys

Antwerpen

Rotterdam

Amsterdam

Enchuysen

Medenblick

Horn

Texel

Vlie

Delfsyl

Groningen

Emden

Bremen

Lubeck

Clein Craysoort

Groot Craysoort

Wismer

Tormunde

Rostock

Robbenes

Barts

Mesonde

Grijpswalt

I. Nordernay

I. Borcum

I. Heligelant

I. Romarck

Doggers

Wesserrysen

Waerbergen

LANDT

PASCAERTE VANDE NOORD-ZEE

NIEULIX WTGEGEVEN

Door

Iacob Colom.

Orcades

Hitlano

Berckens

NOORWEGEN

Duytsche mylen 15 voor een graedt

Spaensche mylen 17 ½ voor een graedt

Engelse en Fran. mylen 20 voor een graedt

Le Fleuue de Texel les Trous de Marsdiep et Goeree et aussi la Meuse.

De Teßelstroom met de Gaten van Marsdiep.

TEXEL

Wieringen

Enchuysen

Medenblick

Breesandt

Dunnicke sandt

Zuydertoren

Naeldertoren

Revel

Oosterend

Den Burgh

Den Hoorn

Den Helder

Kroon Plaet

Kijsdijck

Werverts hoef

De Kolle

Wieringen

Texel

Oogh

Vlieland

Caert vande Reede end Haven van Medenblick beneen die Commende street Wieringer als zwischt vlack bouyes mogen tot dienst vande suit voer alle zee varende luyden perfectelyc gemaeckt door Pieter vanden Keere Ao 1598 op commande last vande E. H. Burgemeesteren vande Regierders der voorsz Stadt Medenblick

Duytsche mylen is in een grade

Eng. ae. Fr. mylen 25 in een grade

Twee Duytsche mylen

2. Lieues d'Allemaigne

De Maſe
met het
Goereesche
gat.

Rotterdam

Delfshaven

Schiedam

Vlaerdingen

Delft

Landt van
Putten

TLANDT
VAN
VOOREN

Den Briel

Landt van
Goeree
Dest vooren
ofte
Landt van
Goeree.

Den Hunder

Den Mals

De Stelle

25

BRITISH MUSEUM
11 JUN 62

Men may runne along to the westwards of the outermost buy, but not far: alongst to the eastwards of it, it is broader and wider.

From the first or the outtermost buye, to the second, the course is south, somewhat westerly, and from thence to the third, fourth, and fifth, which is the buye of the Cape and steeple, it is allmost one course, south southeast, or somewhat southerley, the buyes lye all on the west shoare, men may for need sayle alongst to the westwards of them, but not farre, for the west shoare is so steepe, that if a great shippe should lye with the stemme against it, there should be a head no more then 3 foot, and by the main mast at least 3 fathom deepe, but the east shoare is flat, men may runne alongst by it upon you lead, untill they come within the buyes. The buye upon the tayle, that is, the innermost buye of the Slenck, lyeth from the buye upon Cape and steeple, south and by west, and S.S. west, but the Helder southeast. Men may sayle from the buye upon Cape and steeple, right with the Helder, without danger, or to the buye upon the tayle, and from thence alongst by the south shore, which is also very steepe, or eight to the Helder, according as shall be best convenient for the wind and tyde. The foreflood falleth very strong over the south ground north northeast to the Spaniards channell, untill half flood, and the fore-ebbe to contrary south southeast, untill halfe ebbe. The Helder lyeth from the buye upon the tayle, east southeast, and southeast and by east. When you are come near the Helder, run close alongst by it, for to avoyd a tayle which shooteth off from Geest sand, which you might sayle within when you come in out of the sea, there lyeth a Buye upon it, which you must leave on the Larboard side. Being past the Helder, goe northeast, or somewhat more easterly, or alongst by the Tessels side in eight or nine fathom, unto the Copevaerders road the Wieringhen side is steep.

The faling of the tide.

The Slenck

In the Slenk lye 6 Buys, the innermost lieth upon the tayl of the Keysers plate, west northwest from the Helder. For to sayle out at the Slenk, you must run alongst to the southwards of it, and leave it on the starboard side, and go out west, and west and by south, to the second and third Buy, from the third to the fourth and fifth west southwest, the sixth or outermost lieth a little more southerly.

For to finde the Slenk comming in out of the sea, then bring the Cape upon the Iland Tessell, and the Westen, (that is the steeple of Westeynder Church, which men doe also name the Wambus) one in the other; then they shall stand a little more northerly then east northeast from you, sayle in so right with them, and you shall run in sight of the outermost Buy, which lieth from the Kyckdown west northwest, and west from the Helder. If you come from the northwards or the westwards, & will go in at the Slenk, then bring the Kyckdown east southeast from you, or the great Cape upon Huysdown in a little valley a little to the northwards of the Kyckdown, to wit, betwixt the Kyckdown and Cape Neles house, sayle then so right in with them, untill that the Cape upon Tessell and the Westen are one in the other, then you have the length of the outermost Buy, and shall not misse to meet with it, which lieth in 4 fathom and a halfe at high water, and in a quarter lesse then 4 fathom at a low water. Keep that Cape and steeple one in the other, and sayle in so right with them all alongst untill past the third Buy, which lye all, (like as also the fourth and fifth) in the midst of the fareway, but alongst to the southwards of it is deepest, the south shore is very steep, so that having one cast 4 fathom and a half, the next cast you shall have but three fathom, but the west shore is flat going in. The fourth Buy lieth from the third eastnortheast, or somewhat more easterly: the fourth and fifth, east and by north, the fifth and sixth east and by north, and east northeast. The second Buy lieth at low water 20; or 21 foot, upon the shouldiest of the Slenck: the other Buyes lie in foure fathom at low water, but the sixth, or innermost, in 3 fathom upon the poynt of the tayle, which you may not sayle about to the northwards of it: but must leave it on the Larboard side in sayling in. But you must reckon your tydes well. The foreflood falleth north northeast, thwart over this channell, and the south grounds, untill halfe flood, and to the contrary the fore-ebbe south southeast, untill half-ebbe.

Within the sixth Buy it is broad and wide, and mee sayle in from thence right to the Helder east southeast.

The Land deep.

For to sayle out at the Land-deepe, then run alongst within a bow-shot of the foot strand of Huysdown, and about by the heads, and you shall not misse the innermost Buy, which lieth upon the showlds, neareft the west shore in seventeen foot at high water, and thirteen foot at low water, that shouldy place is not above two shippes lengths broad, over it, and also within it, it is deep enough. Thwart of that Buy shooteth off a little tayle from the shoare towards the Buy, therefore runne close alongst by the Buy, and leave it on the starboard side of you in sayling out. Besides that Buy, there lie 3 other Buyes in the Land-deep, which you must leave all lying to seawards of you, and run through betwixt them and the shore, when you are come past the 4 Buy, you shall be past all the showlds, and you may set your course that way that you desire to be.

For to finde the Land-deep comming out of the sea from the southwards, you must take the sounding of the shore in foure fathom and a halfe, and runne so alongst by the shore, and you shall sayle right with the outermost buye; and doing so, come no neare the shoare, or els you should sayle within the tayle of Arrian Bergers Creek, which shooteth of to seawards from the shoare, to the southwards of the south sand-hill. Or els if you come out of the sea with an open winde, then sed and keepe the great Cape upon Huysdowne, over Dirckoems sand-hil, (that is, a round sand-hil a litle to the southwards of the Kyckdowne, but not so high) and sayle so in right with it, you shall not misse to meet with the outermost buye, which lyeth at low Water in foure fathom and a halfe neareft to the Wester-grounds, or to the hakes, leave it on the larboard side, and runne in alongst to the eastwards of it, through betwixt it and the shore, it lyeth most northeast, and northeast and by north in, you cannot lightly take hurt on neither of both sides, if you doe but take heed to keep you from the shoare. Thwart of the Kyckdowne, or coming to the southwards of it, you must edge a little off from the shoare, for to avoyd a showld which lyeth thereabouts, somewhat off from the shoare. When you come to the second buye, then commeth the mill to the Northwards of the Kyckdowne, and at the third, the mill and Cape Neles howse come one in the other; which two buyes lye both in five fathom at low water. From the third to the innermost buye, it is northeast and by east, run close along to the eastward of it, for to avoyd the foresayd little tayle of sand, which (thwart of it) lyeth off from the shoare, and then forth within a bow shot about by the heads, and so along by the strand of the Helder: For to sayl up from the Helder towards the Wieringe-flat, you must goe northeast, or somewhat more easterly, according as the wind and tyde shall be, or else in eight or nine fathom alonst by the Tessell, untill that the Hoorn come to the northwards of Zuydhaffel, but take heed of the Wieringen side, which is so steepe there, that you may have twelve or thirteene fatham at one cast, and should be a ground before you should be able to heave the lead againe.

Arrian Bergers Creek.

When that the Hoorne commeth then to Northwards of Zuyd-haffell, then keep them so standing, and sayle up so to the Voghel-sand, when that the Eyrland commeth even without the east poynt of Tessell, then you have the length of the buye upon Burghsand, which lyeth on the south shore, upon a tayle of sand, which men may sayle within a five or sixe fathom. From that Buye upon Burghsand, it is E.S.E. to the Beacon upon Voghel-sand, but sayle upon the foresayd markes of the Hoorn and Zuyd-haffell, so long untill that you have the Cape upon Tessell, and the mill of Oofter-end one in the other, then keep men one in the other leaving the first markes, and sayl up so unto the buye or Beakon upon the Nesse, and so you shall run amidst the channel in the fareway which is 10, 11, and 12 fathom deep. If you bring the mill a little to the Westwards off the Cape then you shall be close by the south shoare, which is so steepe, that you may not come neare it, in turning to windwards, then in eight or nine fathom. Being come about the nesse, then go on south and south and west, towards the buy upon flat.

Burghsand

The Nesse.

Tessell is a long plaine Iland, whereupon stand 4 Churches, the westermost hath a high sharpe steeple, and is called west-end, or S. Johns, but by the Pilots if is called the Westen, or the Wambus. To the southwards of that stand an other sharp steeple, called the Hoorn. The three is called the Burgh, which standeth somewhat more to the northwards then the other two beforelayd. The fourth is called the Oogh, or the Koogh, which is the northermost of them all, without steeple, and is covered with blew slates.

The Eyerland lyeth close to the eastwards, or to the northwards of the Tessel, and fast to it, when it floweth somewhat high, it is divided off from the Tessel by the sea, and made to an Iland: it sheweth it selfe off at sea like a low plaine little Iland with little hommocks, there standeth upon it no more then 2 little houses.

Eyerland.

Huysdowne

Huysdown is a short poynt of land with some white sand-hils, where of the greatest and highest is called the Kyck-

downe, or Kykers-downe, the next to the ſouthwards of it, is called Dirckooms ſand-hil, further to the ſouthwards they run flat off by little and little; and at length to nothing in a flat plaine ſtrand. Upon the eaſt end, called the Helder, lye alſo ſome ſandy hills, betwixt the Helder and the Kyckdown it is a moſt flat ſtrand, with ſome ſandy hils like a dike, upon which (about halfe way betwixt both) ſtandeth the litle or the outermoſt cape, the great cape ſtandeth ſomewhat within the land, about eaſt from the Kyckdown.

Huyſdowne, or the Marſdeep and the Maes lie ſouth Z.W ſomewhat ſoutherly, and north northeaſt ſomwhat northerly about 24 leagues aſunder. From Huyſdown to Petten the coaſt lieth ſouth and by weſt foure leagues. Petten hath a litPetten. tle Church with a little ſteeple, and thereabouts you ſhall ſee two other little ſharpe ſteeples in the Northland. A little to the ſouthwards of Petten lieth the Hondboſch, a league to the ſouthwards of Petten lieth Camperdowne, the beſt land to be known thereabouts, the north end is a high ſteep white ſand-hill, which goeth ſloping downe: the ſouthermoſt part is gray and rough, being grown over with head, or ſpyrie graſſe, to the ſouthwards of it lie many rough hommockes or ſand-hils, where ſometimes you ſhall ſee amongſt them a white ſpot, ſo that it is very good to be known. From Petten to Egmont upon the ſea, it is three leagues. Egmont upon the ſea Egmont upon the Sea. is alſo very good to be known, for it hath a thick flat ſteeple, which ſtandeth like a ſayle in the ſand-hill, and a little to the ſouthwards of it you may ſee Egmont-within, which hath two high ſteeples upon the Abbey, cloſe one to the other, whereof the one is ſharpe, and the other (to wit, the northermoſt) is flat, becauſe the ſpire is lately falne downe. A little to the northwards of the Abbey ſtandeth another ſteeple of the church upon the old walls, but it is not ſo high as that upon the Abbey: ſoo that upon all the coaſt of Holland, there is no place ſo good to be known as this. From Egmont upon the Sea, to Wyck upon the ſea, are 3 leagues, that is alſo a Wyck upon the Sea. flat ſteeple: when you are thwart of Wyck upon the ſea, you may ſee Beverwyck a little to the northwards of it, which is a high, thick, and ſharp ſteeple, beſides that, you may ſee alſo betwixt Egmont and Wyck upon the Sea Caſtricom, and more other ſharp ſteeples. From Wyck upon the ſea to Sandfort, it is three leagues. Sandford hath a ſharp ſteeple, with a Sandfort. high fire-beakon, a little to the ſouthwards of it, in the black ſand-hill which ſheweth it ſelfe alſo like a ſteeple.

To the northwards of Sandfort lieth a high white ſand-hil, alonſt over which you may ſee Harlem, high ſquare croſſe Church, which hath a high ſharp ſteeple upon the midſt of the Church, and alſo to the northwards of it a high ſmall ſteeple (called Baeckneſſer ſteeple) thwart of it hath the Nortwyck. coaſt of Holland a great Bay. From Sandfort to Northwyck upon the ſea, are 3 leagues, that is a flat ſteeple, whereby ſtandeth a fire-beakon. To the northwards of Northwyck upon the ſea, you may ſee Northwyck within, a flat ſteeple, whereupon ſtandeth a little cap not very high, and upon the midſt of the Church ſtandeth a little ſmall tower. From Catwyck. Northwyck to Catwyck upon the ſea, it is a great league, being alſo a flat ſteeple, which in times paſt hath had a ſpire: to the ſouthwards of it ſtandeth a high fire-beakon, to ſee to like a ſteeple: you may alſo ſee thereabouts within the land (when you are not very farre from the ſhore) Catwyck upon the Rhyne, and Rynsburgh, and Valckenburgh, all ſharpe Scheve- ling. ſteeples. From Catwyck to Schevelinghen are 3 leagues, the Quire of Scheveling Church is ſomewhat higher then the Church it ſelfe: in manner at the Hagues Church: a little to the ſouthwards of that Church ſtandeth alſo a firebeakon. About halfe a league within the land, you may ſee the Church The Hage. of the Hague, which is very good to be known, the Quire is higher then the body of the Church. The Hagues ſteeple you may ſee far above any other part of the land. From Scheveling to the Heyde it is 2 leagues, and from thence forth The Heyde. to Graveſand, or to the north ſide of the Maſe, one league. The Heyde is a village without a ſteeple: but a little within Monſter. Graveſand The Brill. the ſand-hill, ſtandeth a flat ſteeple, called Monſter. Graveſand is a high ſharp ſteeple, very good to be known, which ſtandeth on the north ſide of the Maſe. The Brill is a great flat ſteeple on the ſouth ſide of the Maes. All this coaſt of Holland, from Huyſdown to the Maes, is altogether a clean ſtrand, which men may come ſo neare to as they will, into 4 and 5 fathom.

Of the Maes and Goerees-gat.

For to ſayle into the Maſe with a ſoutherley winde. The Maſe is now at this time but a wide or flat broad water with little altering of depth, whereupon you may ſayle by his winde.

When as the winde is ſomewhat ſoutherley, paſſe then upon the old Markes, that is: (when you come out of the Sea) before you can ſee the Capes, ſet then the tower of the town of the Briel (which is a thicke and ſtump tower without any ſharpneſſe) eaſtſoutheaſt from you, or ſomewhat eaſterly or ſoutherley, upon condition ſo as you get the Capes in your eye-ſight, bring the ſame then over againſt another, and runne thereupon, or if you bring the tower of the Briel a little higher by north then the tower of Ooſt-voorn, and that you runne thereupon, you ſhall then, without fayle runne upon the utmoſt tunne, which doth lye with low water upon 3 fathom.

From the utmoſt tunne untill the ſecond and third tunne, you may ſayle ſtil upon the Capes. The ſecond tunne lyeth upon 13 and the third upon eleven foote, being there beſides, then comes the tower of Goeree a little upon the foot-ſtrand of the land of the Briel. The fourth tunne lyeth from the third almoſt upon the ſame courſe right upon the Capes, through ſomewhat ſoutherly, betwixt theſe tunnes is the dryeſt of the Maſe about ten foote, by the fourth tunne is it ſomewhat deeper, ſo that it is thereabout eleven foot deep with a common low water, but with a ſoutherly or ſoutheaſt winde runnes it ſomewhat lower. From the outſide untill the fourth tunne is it roome and broad, ſo that you may goe there a reaſonable depth. Beſides the innermoſt Bakon, called Heydike, is it ſomewhat more narrow. The fifth tunne lyeth diſtant from the fourth eaſtnortheaſt, and northeaſt ſomewhat eaſterly. From the fourth untill the fifth tunne, by ſouth along the tunnes, in the right fare-water, is it deepe 13. 15. 16. and 17. foot, and next unto the fifth tunne 5 fathom. The ſixt tunne lyeth from the fifth, eaſt and by north, upon 12 foot, all along there by ſouth is it 5. and 6. fathom deepe, and is called the Pit. When you are paſt the ſixt tunne, then comes Maſelands-ſluſe, and the tower of Vlaerdingen over againſt another, hold the ſame ſo ſtanding, and runne thereupon, ſo long, untill you get the old Head of the Briel in the new, you may runne then unto the land of the Briel, and ſo forth along the South-wall, untill you come before the Briel, where you may ſet it. He that wil higher upon the Maſe may runne forth all along the South-wall, untill he is paſt the new Sluſe, turn then againe to the north-wall. From the eaſt-end of Roſenborough runnes off a Taile where you may ſayle upon, comming out of the weſt. If you bring not the tower of the Briel (when you are paſt the Heads of Black-wall) without or by north theſe Heads, but doe hold there by ſouth, then you cannot ſayle thereunto, but you muſt runne there along a good deale by ſouth. Right by eaſt Heen-vliet goeth the old Maſe in, the ſloud falles therein very ſtrong, whereof you muſt have a care, not to miſleade your ſelfe upon the Tarw-ſand, which is a great Sand-plate, and lyeth before in the The old Maſe. beginning of the midſt of the old Maſe, which doth fall with low water a great deale dry, and ſtretcheth with a long ſmall point weſtward in the Maſe; For to eſcape the ſame, have a care of divers Trees, which ſtand on the ſouth-wall, ſomewhat by eaſt of the Maſe, hold then the tower of Rotterdam by north theſe Trees, then you ſhall not faile upon the Tarw-ſand, but if you take this tower by ſouth theſe Trees, you ſhall certainly come upon the aforeſaid Taile. Tarwſand. By north of the Tarw-ſand goeth a depth in, whereupon you may ſayle in the old Maſe unto Dordrecht, wherein alſo do lye two tunnes, he that will runne therein, goe upon the aforeſaid markes of the tower of Rotterdam and the forenamed Trees, ſo long untill the tower of the Briel comes on a houſe of Pannes, which doth ſtand upon the ſouthſide of the eaſt-end of Roſenborong, and keepe that ſo ſtanding, then you ſhall not miſſe the tunne. When you are paſt the old Maſe, ſayle then in the midſt of the water, till you are paſt Vlaerdingen unto the fifth Sluſes, from thence you take the ſouth-wall, and runne thereby cloſe along, untill you are paſt a little dry Bancke, where you have with low water eleven or eleven and an halfe foot water, comming cloſe by the ſouth-wall, it is deeper, ſtretching thwart over the Maſe, ſo ſoone you are paſt the ſame, goe then right unto the Head of Schiedam, where you have the deepeſt water.

If you wil goe to Delfs-haven, then (being paſt Schiedam) Delfs-haven. keep the ſounding of the north ſhore, and run alonſt by it untill you come before the haven, and anckor there. But if you will ſayle to Rotterdam, then runne alongſt by the N. ſhoare, ſo long untill that Overſchie and the houſe of Spin come one in the other, then edge over, or a litle ſooner unto the S. ſhore, and run alongſt by it, or bring the ſteeple of Vlaerdingen (when you are paſt the head of Schiedam) over the third houſe upon the

on the Schiedams head, and keep that ſo ſtanding ſo long untill the head Charlois (whereupon ſtandeth a little wood of trees) come one in the other, and ſo you ſhall leave on the larboard ſide, a little ſhowld plate, that lyeth about halfe wayes betwixt Schiedam and Delfs-haven, & runne alongſt to the S. wards of the ſhowld that lyeth before the haven upon that foreſayd plate remaineth no more then 7 foot water, and upon the ſhowld before the haven, but 2 or 3 foot water, & are both very ſteep. When the foreſayd mill, and the head of Charlois come one in the other, then keepe them ſo ſtanding untill that you come thwart of the new head of Rotterdam, ſayle then towards the Towne, and cloſe alongſt by it, in betwixt the Towne and the plate there you may ancker.

For to ſail into the ſouther channell of the Maes.

For to find the ſouther channell (comming in out of the ſea) before you can ſee the capes, you muſt bring the ſteeple of the Brill (which is a thick flat ſteeple without any ſpire or ſharp top upon it) E.S.E. from you, or ſomewhat more eaſterly or ſoutherly, according as you get ſight of the capes; then bring them one in the other, and run ſo right in with them, or els if you bring the ſteeple of the Brill a handſpikes length to the northwards of Ooſtvoorn, and run ſo right in, you ſhall without fayle run in ſight of the outermoſt buye, which lyeth at low water in 3 fathom.

From the outermoſt buye to the ſecond and third buye, you muſt ſayle yet right in with the cape; the ſecond buye lyeth in thirteen, and the third in eleven foot; being thwart of it, the ſteeple of Goeree commeth a little upon the foot ſtrand of the land of the Brill. The fourth buye lyeth from the third, yet neere upon the courſe right in with the capes, but a little more ſoutherly. Betwixt theſe buyes is the ſhowldeſt of the Maes ten foot, by the fourth buye it beginneth againe to bee deeper, that lyeth in eleven foot. From without unto the fourth buye, the channell is of a good bredth, ſo that you may turne into windwards a good wayes on both ſides off the buyes, and borrow off the ſhoares on both ſides by your lead, but right alongſt a litle to the ſouthwards of the buyes, is the perfect deepeſt water. The fift buye lyeth from the fourth eaſtnortheaſt, & northeaſt & by eaſt, on the north ſide of the deepe on the Honde-plate in eleven foot, which you muſt leave on the larboard ſide, and run in about to the ſouthwards off it. From the fourth to the fifth buye alongſt to the ſouthwards of the buyes. in the right fare-way, it is deepe thirteen, fifteen, ſixteen, and ſeventeen foot, and by the fift buye five fathom. The ſixth buye lyeth from the fifth eaſt and by north in eleven foot and a halfe, alſo on the north ſhoare, or Honde-plate, along to the ſouthwards of it, the channell is at the narroweſt, and five and ſixe fathom deepe, the ſouth ſhoare is thereabouts very ſteepe, cloſe to it, it is ſixe, and ſixe fathom and a halfe deepe. As ſoone as you come paſt the ſixth buye, then commeth Maesland-ſluce, and the ſteeple of Vlaerdinghen one in the other; keepe them ſo one in the other, and runne in ſo right with them, ſo long untill that you get the houſe of Lucht over Ambroeck, and then you ſhall run farre enough alongſt to the northwards of the Polder, and by the ſide of the ſeventh buye, alongſt in the right deepe; you ſhall finde in this fareway, foure fathom and a half, goe then towards the Brill, or upwards alongſt where you deſire to be, as is ſayd here before in the deſcriptiō of the norther channell.

NOTE.

All theſe foreſayd depths, and thoſe which follow of the Goerees-gat, are ſet there (as alſo in the Carde) according to the loweſt water of a common tyde, and it floweth there 6 foot up and downe.

The Goerees-gat.

Betwixt the land of the Brill and Goeree, goe in alſo two channells, the northermoſt is called the Quacks-deep, and is not for great ſhips, but onely for ſmackes, and ſmall ſhippes: the other is the Goerees-gat. Betwixt theſe two channells lyeth a great plate, called the Hinder, which at low water is not deeper then five, ſixe, and ſeven foot. To the northwards of it goeth in the Quacks-deepe, and to the ſouthwards of it the Goerees-gat.

Quacks-deep.

For to finde the Quacks-deepe comming in out of the weſt, you muſt keepe the ſteeple of the Bril eaſt from you, and run ſo in, untill that a great country houſe, (which you ſhall ſee ſtand alone a litle within the poynt of the Quacke) come to the ſouthermoſt ſand-hils of the land of the Brill, which ſhall then ſtand neare about ſoutheaſt from you, keep that then ſo ſtanding, and runne ſo right in, untill that Ooſtvorn come to the weſtermoſt or ſouthermoſt ſand-hils, then runne in alongſt by the ſtrand ſomewhat more ſoutherly, untill that Goeree com to the eaſtwards or within the ſand-hils, and then you ſhall bee paſt the eaſt poynt of the Hinder, which the Pilots call the Buyen, runne then towards Goeree, or to the eaſtwards, to Hellevoets ſluce, where you deſire to be.

Goerees-Gat.

For to ſayle in at the Goerees-gat, you muſt bring the ſteeple of Goeree, and the Cape upon the land of Goeree, one in the other, and then they ſhall ſtand eaſt and by ſouth, and eaſt ſoutheaſt from you: or if you can not ſee the cape, then bring the ſteeples eaſt and by ſouth, or eaſt ſoutheaſt from you, according as you ſhall have the winde, ſayle in right with it, untill you come hard aboord the ſtrand, and within a bauwles caſt in alongſt by it, eaſt and by north, & eaſt in, ſo long until that the land doe fal away more to the ſouthwards: thereabouts runneth off from the ſhoare a little tayle which men might ſayle within, in going out, but not in comming in, there you muſt edge a little further off from the ſhoare, being paſt that, luffe up againe towards the ſhoare, of haven of Goeree, & anckor there before it, or els if you will run up to Hellevoet-ſluce, then bring the mill which ſtandeth to the weſtwards of Goeree, a litle to the northwards of the ſteeple of Goeree, keepe then ſo ſtanding, & ſaile ſo up to Hellevoet-ſluce, & you ſhal come neare the plate which lieth over againſt or to the ſouthwards of Hellevoet-ſluce.

For to ſaile to Hellevoet-ſluce.

When you ſaile in at the Goerees-gat with a bare ſouthерly winde, & that you can not bring the cape & ſteeple one in the other, you may bring the ſteeple well e. ſ. eaſt, or a great capſtone bars length to the northwards of the cape, & then run over untill you come againſt the ſtrand, and ſo you ſhall runne over the tayle of the Hinder in 14 & 15 foot at low water, but when the cape & ſteeple are one in the other, you ſhall not have leſſe then 19 or 20 foot. Being come over the tayle of the Hinder, in the right deepe, it is 6, 7, & 8 fathom deepe, the neerrer the ſtrand the deeper water. A little within the cape, or almoſt thwart of it, is the narroweſt of the channel, further in it is wider, on the n. ſide towards the Hinder, it is riſing ground, but the ſouth ſhoare alongſt by the ſtrand is very ſteepe.

Of the Tydes and courſes of the ſtreams, about theſe foreſayd places.

VPon the Wieringer-flat maketh full ſea a ſoutheaſt or northweſt Moone.

Before Teſſel, in Coopvaerders road, an eaſtſoutheaſt, and weſtnorthweſt Moone.

Without the grounds or shoulds of the Teſſell, an eaſt and weſt Moone maketh the higheſt water, and in the entring of the Teſſel, an eaſt and by ſouth, and weſt and by north Moone: but the flood goeth a good while longer in. And likewiſe runneth the ebbe alſo longer out, then the loweſtwater. When the Moon is ſouth, or ſomewhat more weſterly, it beginneth apparantly to flow without on the ſtrand, and likewiſe upon the shouwlds.

The fore-flood, and the after-ebbe out of the Teſſell, fall both one with the other N. N.E. thwart over the grounds and channels, and right out at the Spanjards channell, untill halfe flood: and to the contrary, the fore-ebbe, with the after-flood fall right in at the Spanjards channell S, S. eaſt over the ſouth grounds, and thwart over the Slenk and the other channels, untill half ebbe. A little while before half flood, the flood beginneth to runne right in at the channell, and againe a little before half ebb, the ebbe beginneth to ſet right out at the channell. Therefore he that will ſayle into the channels, muſt reckon his tydes very wel, wherein conſiſteth very much. Without before the channell in the ſea, the tyde turneth about with the Sunne, ſo that when as a ſhippe doth lye at an anckor without the channels, and hath neither good nor hurt of the waves of the ſea, it ſhould have but a little ſtill water.

In the North Sea the tyde falleth round, more then halfe tyde, upon the Broad fourteens, it turneth about with the Sunne or the Moone, and falleth but a quarter tyde right alongſt the ſea. Nearer the coaſt of Holland and Zealand, the tyde falleth (whether it be flood or ebbe) ſomewhat ſloping towards the land, but in the midſt of the tyde, it falleth right alongſt the ſea, and in the laſt of the tyde, it ſetteth to ſeawards, towards the weſtwards or the northwards.

Betwixt the Marſdeepe and the Maes in the fareway, the fore-flood commeth out of the north ſea, and turneth about with the Moone, falling towards the land northeaſt, and northeaſt and by north.

The Fiſhermen of the Maes ſay, that when they are out of ſight of the land, they can perceive in calme weather by the turning about of the tide, whether they be to the northwards or to the ſouthwards of the Maes. Somewhat to the ſouthwards of the Maes, the after-flood turneth about againſt the Sun, but to the northwards of the Maes, is turneth about with the Sunne untill the laſt quarter, and then it ſetteth towards the ſhore, or the coaſt next unto it. They ſay alſo, that alongſt the coaſt of Holland, men have no helpe of the ebbe in turning to windwards towards the Maes, except they bee without ſight of the land, becauſe there goe no ebbes by the land, when the wind is to the ſouthwards of the weſt.

Before the Maes a S.W. and by weſt, and a N.E. and by eaſt moone maketh a high water.

Before the Brill a S.VV. and S. VV. and by ſouth, and northeaſt, and N. E. and by N. Moone.

Before the old Maes a S. W. and N.E. Moone.

Before Rotterdam a S. VV. and by weſt and N.E. and by E. moone.

Before Dordrecht a weſtſouthweſt moone.

In the Goerees-Gat, & before Goeree, a S.VV. & by S. & S.S.VV. moon.

Before Hellevoet-ſluce a S. VV. and by ſouth moone.

Betwixt the Marſdeep and the Maes in the fareway, the foreflood commeth out of the north ſea, and turneth about by little and little N. E. and N. E. and by north towards the land.

In the ſea thwart of the places, (without ſight of land) it is a poynt, or a poynt and a halfe later full ſea, the further from the land the later.

Not very long after that the flood beginneth to go without the Maes, it doth begin alſo to go into the Maes, but the after-flood falleth ſtrong in, and ſo likewiſe in the Goerees-gat. Cloſe before the channels by the land, the tyde turneth about with the Sunne, ſo that when the after-flood falleth into the channels, it turneth to the ſouthwards. and bekommeth againſt a running ebbe; the after-ebbe falleth againe thwart off to ſeawards out of the channels.

Of the depths & grounds about theſe places.

Five or ſixe leagues without the Teſſell, lyeth the broad fourteens, lying from thence N. eaſt with a ſmall tayle which lyeth about north from the Teſſell, and N. W. from the Flye, to the ſouthwards it runneth with the eaſt ſide againſt Catwijck or Scheveling, but the weſt ſide lyeth off at leaſt 11 or 12 leagues thwart off to ſeawards from Nortwyck and Catwyck, it is a banck moſt of fourteen fathom deep, in ſome places ſomew hat more or leſſe. Betwixt it & the land it is againe 18 and 19, and to the northwardes 20 fathom deep. When you come over it about the Teſſel or the Flye, and come againe in 16 or 17 fathom towards the land, then you ſhall begin to ſee the land.

There runneth of to the ſouthwards into the ſea from the coaſt of Holland 3 ſmal banckes or ribbes, which are ſomewhat broad & showld by the land, & run off sharp & deepe to the end, the firſt the fiſhermen call the Smal-eight, and beginneth a litle to the ſouthwards of Egmont upon the ſea: the ſecond the Wterrib thwart of Wyck upon the ſea: the third and ſouthermoſt the Hard, a litle to the northwards of Sant-foort.

The high ſteeples of Holland and Weſt-Frieſland, as Egmont-within, Wyck upon the ſea, Santfoort and other more, men may ſee before they can ſee the ſand-hils five leagues without the land, in 14 or 15 fathom, that is upon the ſouth end of the Broad-fourteenes, but Camperdownes, and the ſand-hils thwart of Haerlem, they may ſee before they can ſee ſome of the ſteeples. The ſteeple alongſt the coaſt are moſt of them flat, except the Beverwyck, Schevelinghen and Santfoort.

Before the Maes and Goeree men may ſee the land in 14, and 15 fathom.

Courſes and Diſtances.

From Teſſel to the Maes, S. S. W. —— —— 24 leagues
From Teſſel to the Heads, or the Straît betwen Callis and Dover, S. W. ſomewhat ſoutherly —— —— 53 leagues
From Teſſel or Marſdiep to Callis cliffe ſouthweſt and by ſouth 53 leagues
From Teſſell to the North foreland S. W. —— 48 leagues
From Teſſel to Orfordneſſe W. S. W. —— 37 leagues
From Teſſel to Yarmouth weſt, and weſt and by ſouth —— 33 leagues
From Teſſel to the Shield, or Crommer weſt —— 40 leagues
From Teſſel or Marſdiep to Plambrough head weſtnorthweſt — 60 leagues
From the Marſdiep to Lieth in Scotland N. W. and by W. ſomewhat northerly —— —— —— 100 leagues
From the Marſdiep to Newcaſtle W.N.weſt ſomewhat northerly 83 leagues
From Teſſel to Bockeneſſe northweſt, and N. weſt and by north 117 leagues
From the Marſdiep to Aberdine N. W. ſomewhat northerly 113 leagues
From the Marſdiep to the Liet of Berghen in Norway north 117 leagues
From the Marſdiep to the north end of Hitland N.N. weſt 160 leagues
And then you ſhall fall about five leagues to the eaſtwards of the land.
From the Marſdiep to the Naze north and by eaſt —— 93 leagues
From the Naes or Goeree to Dover, ſouthweſt and by weſt ſomewhat eaſterly 35 leagues
From the Maes to the north Forland, weſtſouthweſt weſterly 32 leagues
From the Maes to the Naze, weſt —— —— 29 leagues
From the Maes to Hitland northnorthweſt —— —— 180 leagues

Heights.

The Marſdiep lyeth in three and fifty degrees, ſayle out of the north ſea, (being in that height) eaſt on, and you ſhall fall right with it.
The north ſide of the Maes lyeth in 52 degrees

How theſe Lands doe ſhew themſelves at Sea.



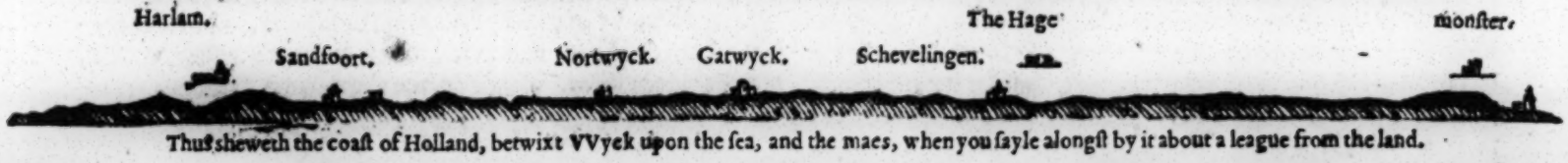
Thus appeareth the Iland Teſſell, when it lyeth eaſt and by north from you.



Huyſdowne sheweth it ſelfe thus, when it is eaſtſoutheaſt from you.



Thus sheweth the coaſt of Holland betwixt Huyſdowne and Wyck upon the ſea, when you ſayle alongſt by it, about three leagues from the land.



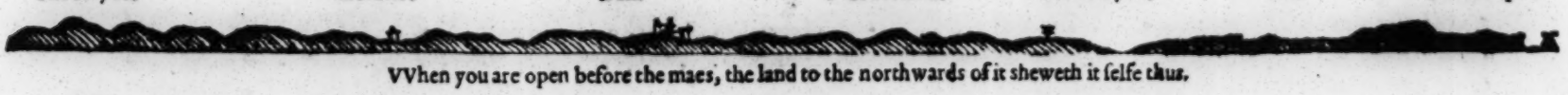
Thus sheweth the coaſt of Holland, betwixt VVyck upon the ſea, and the maes, when you ſayle alongſt by it about a league from the land.



Theſe two figures belong to the A A one to the other.



VVhen Graveſand is ſoutheaſt and by ſouth from you, being a halfe league without the land; then the coaſt of Holland to the northwards of the maes sheweth it ſelfe, as is portrayed in the two figures here above.



VVhen you are open before the maes, the land to the northwards of it sheweth it ſelfe thus.



Theſe two figueres one to the other.



VVhen you are open before the maes, being northweſt and by weſt from the Brill, then the land to the ſouthwards of the maes sheweth it ſelfe, as is prefigured in the two figures here above.



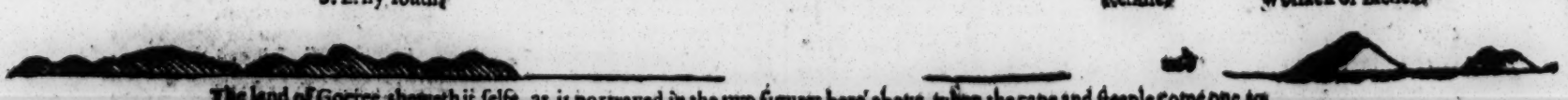
The two figueres following belong unto this at the A A and B B, one to the other. Goeree.



When you are before the Goereeſe gat, about a league without the land, then the land on both ſides of it sheweth, as is demonſtrated in the three figures here above.



Theſe two figures belong at the croſſes one to the other.



The land of Goeree sheweth it ſelfe, as is portrayed in the two figures here above, when the cape and ſteeple come one to the other, and that you are a league and a half without the land.

The

6 ×

Brouwers haven

Landr van Cats

Duytsche mylen 15

Spaansche mylen

Fra. myle

'T LANDT VAN GOEREE

'T LANDT VAN

Ornlandt

SCHOUWEN

Der Veere

Armuyden

Der Capelle

Vlissers gat

Dyck

Stroom

Banck

Pascaarte vande WIELINGHE

't Veer gat 't gat van Zierickzee en Brouwershaven Nieulycx beschreven door Iacob Aertsz. Colom

Carte Marine de Trous de Wielinges et auſſi les Trous de Zierickzee, et der Veere.

Lieues d'Allemaigne 17 en un degre

Lieues d'Espaigne 17½ en un degre

Lieues Angl. et Franc. 20 en un degr

V L A E N

D E R E N

C H E

N

Vlissingen

Oost Souburgh

Middelborgh

Breskens

De Nol

Dolle bocht

Kattendijke

Ouden Haffen

Raysen

Doorlay

Deep Rein

De Spleet

Hoofd Banck

Sloeve

Sandt

Inwaert

Inwaert

Inwaert

BRITISH
MUSEUM

The Firſt part of the Fierie Columne.

THE FIRST BOOKE,

Of the

WESTERN NAVIGATION

Containg

The deſcription of the Zea-Coaſts of Holland, Zealand, and Flanders, from Teſtell to the Heads of Dover of Calice.

The firſt Demonſtration,

Where in are deliniated the Theſſel-ſtreame, and the Channell of the ſame, as alſo the Maſe, and the Channel of Goeree.

Pampus.

FOR to ſaile from **Amſterdam** to the Fall of Urck, you muſt keep the middle of the channell in ſayling to Tyoort, and from thence over **Pampus**, with a ſhippe of greate draught, that draweth tenne foot or more, keepe Marcken church without to the land of Udam, called Schyteldoecks-haven, ſo long untill that the ſteeple of Zuyderwouw come paſt Kinnigherbuert, which are the houſes half wayes betwixt Schiteldoecks-haven and Durgerdam, goe then towards the land eaſt, untill that the New church of Amſterdam come aboute Durgherdam, keepe that ſo ſtanding, untill that the church of Weeſp become paſt the Houſe or Caſtle at Muyen, ſo that it doe ſtand ſomewhat nearer to Muyen then to the Houſe, keepe Weeſp ſtanding ſo, untill that Edam come without the eaſt end of Marken. In this farewaye it is a foote deeper, then if you ſayled right through.

For to avoyde Muyen ſand: men were wont to bring the houſes which were wonte to ſtand upon Tyoort to the ſouthwards of the Heylighet-ſtee at Amſterdam, thereby you can make ſome reckoning, they are good longſt markes: when Monnickedam is aboute the weſt-end of Schyteldoecks-haven, and the houſe at Muyen betwixt Weeſp & the Church at Muyen, then are you thwart of Muyen-ſand. For to ſaile right through over Pampus, then keepe the ſteeple of Diemen over or aboute the pointe of Tyoort, ſo lang as you can ſee Tyoort, that is a right longſt marke for to ſaile over Pampus.

When you are come thwart of the eaſt ende of Marcken, goe then on northeaſt, or ſomewhat more eaſterly towards the Fall of Urck, which is ſeven leagues, when you are come within a great league of Urck, you ſhall meete with a hard ſand, called the Houtribbe, lying ſouth eaſt and northweſt thwart over the Farewaye, there is no more water upon it, then upon the Flat of Wieringhen, or of Freeſland, you ſhall finde alſo no deeper water there then right through. When Enchuyſen lyeth northweſt and northweſt and by weſt from you, then you are upon the Houdtribbe. Before that you come againſt the ſand, you can by night ſee the fire upon Urck. When that Urck or the fire is more northerly then northeaſt from you, and that you get ſhoulding, then that is certainly of the Houtribbe: for ſo you cannot come to near the Enchuyſen ſand. When you come from the ſouthwards, you are not about the Enchuyſen ſand before that the Church upon Urck come without the litle village of houſes, which is then eaſt and by ſouth and eaſt ſoutheaſt from you: if that then you goe awaie northweſt and by weſt or weſtnorthweſt, you ſhall runne cloſe alongſt by the ſide of the ſand. With a ſhip of great draught, bring the church a good wayes through the houſes, untill that it ſtande eaſtſoutheaſt from you, then goe bouldly on northweſt and by weſt, or keepe Medenblick without the point of the Ven, and ſo you ſhall not come to near, neither to ſand nor ſhowlde. Likewiſe if you come from the north wards, and bring Urck not more eaſterly then eaſtſoutheaſt from you, then you cannot take hurt alſo of the Enchuyſen ſand. From Urck to the buyes upon the Cripple and Hofſtede, the courſe is northweſt & by weſt, with that courſe you may runne all alongſt unto the ſouther buye upon Wieringen flat: in turning to windwards you may wel bring Medenblick a litle within the point of the Ven, but when Medenblick is without it, then you are in the right farewaye.

Marks of Enchuyſen ſand.

From the Buye upon the Crippell, which lyeth upon the eaſt end off the Cripple-ſand three fathom) unto the Beakon upon Cripple-ſand, the courſe is northweſt and by weſt, and northweſt. When Lutkebrooke, a ſmall ſpire ſteeple commeth to Hem (which is alſo a ſpire ſteeple) then are you thwart of that beakon. From the Beakon upon the Cripple, unto the ſouther buye upon Wieringher flat, the courſe is northweſt and by weſt, or weſtnorthweſt, according as the wind and tyde ſhall bee, it lyeth at high water with an ordinary tyde, in thirteene foot and a halfe, the markes thereof are theſe: Greatebrooke commeth betwixt two Hay-ſtacks to the eaſtwards of the five water-mils which ſtand to the eaſtwards of Warvers hoof, that is a long marke in the S. Twiſch a ſharpe ſteeple to the weſtward of Medenblick, commeth over Almerdorp, there was wont to bee a little flat ſteeple, but it is fallen downe', and therefore now not ſo good to bee knowne, that was a right thwart marke. Upon Wieringen ſtandeth a cape, bring Eaſtlander ſteeple, which is a flat ſteeple upon Wieringen, right over the cape, and ſayle ſo right with it, and you ſhal come right with the buy. When you are at the buy, Weſtlander Church commeth then over Cleverſtee, and the eight mils to the eaſtwards of Medenblick, a little without the Towne. For to finde the deepeſt of the flat comming from the Cripple, you muſt bee carefull to looke out for the foreſayd markes. If that Twiſch come firſt to Almerdorp, before Cleverſtee come to Weſtlander Church, then you are to neare to Breeſand, or the grounds on the ſtarboard ſide, theſe are ſure markes for to ſayle over the flats, when there lye no buyes. Alongſt to the eaſtwards of the buye is the deepeſt water. If you will anckor before the Wieringer flat, then come no nearer the Flat then when Twiſch commeth a little to the Northwards of Opperdoes, or halfe wayes betwixt Opperdoes and Almerdorp.

Markes of the beakon upon Cripple-ſand.

Markes of the ſouther buy upon the Flat.

For to ſayle from the foreſayd ſouther buy over the Gammels to Medenblick, you muſt bring the weſtermoſt water-mill of the eight (which ſtand to the eaſtwards of Medenblick) a capſtone barres length without or to the eaſtwards of the Bulwarke of the Towne, and ſayle then boldly without feare right in with them, untill that you come into the road where the ſhips commonly lye, or elſe, if you deſire to goe into the Haven, then ſayle in right to the norther-head, there is nothing that can hurt you. But if you muſt turne to windwards over the Gammels, and that your ſhip draweth more then eleven foot water, then runne not further over to the weſtwards, then that the foreſayd Water-mill commeth allmoſt within, or a handſpikes length to the foreſayd Bulwark, ſo that yet you may well ſee through betwixt them, then caſt about, and run over to the eaſtwards, ſo long untill Greatebrooke come in the five water-milles, which ſtand to the eaſtwards of Warmerſhoof, or on to the eaſtwards of them, ſo you ſhall not doe amiſſe, for it is there broad and wide.

For to ſayl over the Gammels to Medenblick.

If you deſire to ſayle over the Gammels to Medenblick, when you come from the Flye, then bring the ſteeple off Opperdoes over the weſtermoſt Water-mill off five, which ſtand to the weſtwards of Medenblick, and runne in ſo right with them, untill that the weſtermoſt water-mill off eight (to the eaſtwards of Medenblick) come to ſtand a capſtone barres length without the Bulwark, as here before once already hath been ſayd. Having theſe marks thus, and that it doe become

darke, then goe on ſouth and ſouth and by eaſt, according as the wind and tyde ſhal be, and you ſhall not doe amiſſe, neither ſhall you miſſe the Town. In this foreſayd faire way, there is no leſſe depth then upon the Wieringher flat, and all ſoft ground.

When the ſteeple of Twiſch is over the weſtermoſt water-mill except one of the five which ſtand to the weſtwards of Medenblick, and Grootebroeck, in the little village, to the E. wards of the five water-mils on the Eaſterdyke; then are you in 13 foot from the northweſt poynt of the Cripple, and paſt the taile of the Cripple. Upon theſe foreſayd markes, and 13 foot, lyeth a buye with three legges, and on the foreſayd weſt ſhoare lye three drift-beakons in 12 foot, and then commeth the weſtermoſt water-mill (of the eight which ſtand to the eaſtwards of Medenblick) and ſo you ſhall not have leſſe water then upon the Wieringer flat.

For to ſayl over the Wieringen flat.

From the Souther buye to the ſecond or middle buye, the courſe is northweſt and northweſt and by north: but for to find the deepeſt water, goe firſt northweſt ſo long untill that Ypels-hoofs Church come over the water-mill, which is called the Bolmill, and then forth n. w. and by n. When the Corn-mill upon Wieringen commeth in the ſwamp off the Oever, then you have the length of the ſecond Buye, which lyeth upon the weſt, or the ſouth end of a little plate, called the Repell, the faire way is alongſt to the weſtwards of it, there being at low water two fathom large, and at high water ſcarce three fathom deep. On the weſt ſide of the fayre way, betwixt the ſouther-buye, and the middle-buye, neareſt the middle-buy, lyeth a hard ſand called the Sow, or the old Sow, which on the eaſt ſide is very ſteepe and needle to which (in ſayling up) men might ſayle within a poynt or tayle of it: to the weſtwards of it ſhooteth off another tayle to the northwards, a great wayes towards the northeaſt buye. Upon the outermoſt, or northermoſt poynt, called Seughoort, ſtandeth allwayes a beakon. Upon Wieringer upon the Oever ſtand two litle capes with barrels on them, the one upon the North-end off the Oever, and the other upon the head, they are ſo little, that you can hardly ſee them: when you come off from the ſouther-buye towards the middle-buye, then keepe them not one in the other, for if you keepe them one in the other, then you will bee very cloſe by the ſouth ſhoare, & ſhall but even run cleare of the old Sow, but keep the ſouthermoſt a little to the weſtwards of the northermoſt, and then you ſhall run alongſt the right fareway, and ſhall not take any hart of the old Sow. When you come neare the middle-buy, you muſt leave theſe marks and uſe them then no longer.

From the middle buye unto the Norther-buye, the courſe is northnorthweſt, when you come thwart off the norther-buye, then commeth Ooſtlander Church and the Cornmill, both over a little Chappell covered with red tiles, that ſtand upon the Oever, thwart off it alſo ſtandeth the foreſayd beakon upon Seughoort. By the Northerbuye it is ſcarce three fathom deepe at high water, the fareway is alonſt to the weſtwards off it. When you come by the norther-buye, keepe ſtill the foreſayd northnortweſt courſe, untill that Ooſtlander Church come to the northwards of the Sedge-dyke of the Oever, and then you are paſt the little plate which lyeth by the norther-buye.

When as that Ooſtlander Church commeth from the Sedge-dyke, goe then north, and north and by eaſt on, to the Neſſe. In that fareway it is broad and wide, the weſt ſhoare all alongſt unto the Neſſe, is very flat, there you cannot take any hurt, but may boldly runne alongſt by it, although it were a lee ſhoare, but the eaſt ſhoare is ſteepe, eſpecially ſomewhat further out towards Jaep-vaer. When the great Cape from Wieringhen ſtandeth a great ſhippes length to the eaſtwards off the houſes upon the Oever, then you are well to waye, and right in the fare-waye betwixt the norther-buye and the Neſſe. When Ypels-hoof and Stru are one in the other, there is the roade, where men doe lade and unlade, you may anckor thereabouts in the middeſt of the fareway in foure fathom, the nearer the eaſt ſhoare the deeper. Jaep-vaer is a tayle of ſand or plate faſt to the eaſt ſhoare, which you might ſayle within when you ſayle off, but ſpecially in ſayling upwards in ſix or ſeven fathom, upon it lyeth a blacke buye. Upon the poynt of the Neſſe over againſt Jaep-vaer lieth a white buye, theſe lye both in three fathom, or three fathom and a halfe. In the winter, when the buyes are taken away, then in place of the white buye there is ſet a beakon upon the Neſſe. From the Neſſe to Vogel-ſand, the courſe is moſt northweſt, therefore when you have gotten the length of the buye or the beakon upon the Neſſe, goe then more weſterly, northnorthweſt, and northweſt and by north and northweſt,

the Neſſe.

Iaepvaer.

unto the Beakon upon Voghel-ſand; the weſt ſhoare you may ſound in ſix and ſeven fathom. The markes of this reach are theſe, the Mill of Ooſter-end (which is a little Village upon the eaſt end of Teſſell) and the Cape which ſtandeth upon the dyke, one in the other, then are you amiddeſt the Channell in the deepe, that is, tenne, eleven, and twelve fathom: when the mill ſtandeth ſomewhat to the ſouthwards, or to the weſtwards of the Cape, then are you by the ſouth ſhoare, which is very ſteep, which (in turning to windwards) you may not come neare then in eight or nine fathom, but being paſt Voghel-ſand, it groweth ſhowlder, and the eaſt ſhoare very ſteepe: As ſoone as you finde that it beginneth to ſhowld, you muſt caſt about, elſe you ſhould preſently be on againſt the eaſt ſhoare.

Voghel-ſand.

From the beakon upon Voghell-ſand, the courſe is weſt-northweſt unto the buye upon Burg-ſand, which lyeth upon the tayle of the Share, the markes off it are: the Eyerland even unto the eaſt poynt off the Iland Teſſel, and the Church off the Horne upon Teſſell too Zuyd-haffell, which is a few houſes to the northwards off the Schonce. Or elſe when you come about Voghel-ſand, then keep the foreſaid cape and mill one in the other, untill that the foreſaid Horn-come to, or through Zuyd haffell, and then run on, keeping them ſo: when that Eyerland commeth even to the eaſt poynt of Teſſell, then you have the length of the buye upon the Burg-ſand, you may bring the Horne well ſomewhat to the northwards of Zuyd-haffell, but in no wiſe to the ſouthwards of it, for elſe you ſhould ſayle on againſt the ſouth ſhoare. For to ſayle from thence to Copevaerders roade, you muſt keepe the Horne to Zuyd-haffell, and ſayle forth keeping them ſo, untill you come againſt Teſſel in the roade, and anckor there where you thinke good. Before Ooſter-end it is beſt for ſmall ſhips, there it is ſhowld water, and there goeth little tide, but moſt ſhips doe anckor before the Geeſt.

Burgſand.

Vpon the poynt of the Boſſe lyeth a white buy in three fathom on the weſt point of the Balgh, which you muſt leave on the ſtarboard ſide, & run about to the eaſtwards off it into the Balgh, and then forth alongſt by the beakons to Wieringhen, you muſt leave all the beakons alſo on the ſtarboard ſide.

The Boſſe.

For to ſayle from the Copevaerders road out at the Teſſel, you muſt goe firſt ſouthweſt or ſomewhat weſterly to the Helder, or run alongſt by the Teſſell ſide in 9 or 10 fathom, untill you come neare the Helder, and then goe out weſt cloſe alongſt by the ſhore of the Helder, and by little and little ſomewhat more northerly, untill that the capes upon Huyſdown be one in the other, or that the greateſt come through the ſmalleſt, to wit, to the weſtwards of it, and then goe on N. N. W. or more northerly or weſterly, according as the wind or tyde ſhall be, untill you come againſt the north ſhoare, in 5 or 6 fathom, and run boldly out alongſt by it, untill you be cleare out at ſea.

For to ſayl out at Teſſel.

When the tower of Weſter-end (which men do name the Weſten, or the Wambuys) commeth to be E. N. E. from you, or a little more eaſterly, then you have the length of Cape and ſteeples buy, that is, the innermoſt buy of the Spaniards channell, which you ſhall eſpie on the larboard ſide. To the northward of it lye three other buyes, all alongſt the E. ſide of the Keyſers-plate, neare upon one courſe, (to wit, N. N. W. or a little more northerly) which you muſt leave (inſayling out) all on the larboard ſide. The outermoſt buye lieth from the fourth north ſomewhat eaſterly upon the poynt off the Keyſers-plate, in 22 foot at low water, you may run alongſt to the weſtwards of it, but not far, for the Keyſers-plate is on the eaſt ſide unto the outermoſt end very ſteep, but the eaſt ſhoare of the deepe it is flat. When you come thwart of the foreſayd outermoſt buye, then lyeth the Kooger Church right E. N. E. from you, and the capes upon Huyſdown are one in the other.

For to finde the Spaniards Channell comming from the northwards, you muſt bring the Capes upon Huyſdowne one in the other, or a little through one another, to wit, the Runner that is the ſoutermoſt and greateſt, a little to the eaſtwards of the other, then they ſhall ſtand S.S.E. from you, ſayle then right in with them, keeping them ſo, and you ſhall ſayle right upon the outermoſt buye, or in ſight of it, which lyeth (as is ſayd) upon the poynt of the Keyſers-plate in 22, foot at low water: when you come to the buye, the Koger Church ſhall lye due eaſtnortheaſt from you.

For to ſayl in at the Spaniards channel.

Therefore if you come from the weſtwards or the ſouthwards, then bring that Church not more northerly then e. e. e. but rather a litle more eaſterly from you, and ſayle then right in with it, untill that the Capes come one right againſt another, or elſe you ſhould lightly ſayle upon the Keyſers-plate, which is without upon the North-ſide very ſteepe.

Men

The ſecond Demonſtration,

Wherein are shewed the Channels of Brewers-haven, Sierick-ſea, the Vere, as alſo the channels of Zealand, in the Whieling.

BEtwixt the land of Goeree and Scowen, there goe in alſo two channels, the northermoſt is called the Kevitſen (which is onely for ſmall ſhips) the ſouthermoſt for great ſhips is called the Brewers havens channell. Betwixt them lyeth a great dry ſand, called the ſpringer, which floweth not under, but with very high floods.

Kevitſen. For to finde the Kevitſen, you muſt bring the ſteeple of Zierickſea ſoutheaſt and by ſouth, or a little more ſoutherly from you, and then you ſhall eſpy upon the land of Scowen, about the ſteeple of Zierickſea, a wood of trees, bring that and the foreſaid ſteeple of Zierickſea one in the other, and runne ſo right untill you come againſt the ſand, ſo ſhowld or neare as you can, and then you run farre enough alongſt to the weſtwards of the weſt head. When you come within the weſt head, againſt the ſand on the ſouth ſide, then goe in eaſt alongſt by the foreſayd dry ſand the Springer, at the end of the aforeſaid dry ſand ſhooteth off alſo a point under water, the which you muſt ſound for: being paſt that, runne then directly with Brewers-Haven, as is ſhewed in the Card. In this channell it is upon the ſhowldeſt ten foot deep.

The Brewers haven.

Before the land of Schowen thwart of the Brewers haven channell, lye three bankes, the outermoſt, called the Breebanke, lyeth a kenning without the land, upon which it is 7 fathom deep, and again within it 19 fathom deep, upon the ſecond nearer the ſhoare, it is five fathom deepe, and againe within it 7 fathom deep; the third called the Ooſter, lyeth cloſe by the Land, and runneth into the eaſtwards, betwixt Schowen and the land of Goeree, upon it is no more then ſix foot water, when you will ſayle into the channell of Breuwers-Haven, you muſt goe about to the Weſtwards of it.

Reniſſe Wolſack. Upon the weſt end of Schowen ſtand two Capes, bring them one in the other, and runne ſo right in with them, untill the ſteeple of the Reniſſe (which ſteeple is ſomewhat ſharpe) come to the Blenck or Wolſack, that is, a high white ſandhill, (which ſheweth it ſelfe out in whiteneſſe high above all the other Sand-hills) then leave the Capes, and runne in by the marks of the Blencke and Reniſſe, untill that Outdorp, (a little white ſteeple upon the Land of Goeree) come to the ſteeple of Goeree, and ſo you ſhall go in betwixt the Ooſter of the larboard ſide, and the Hill on the ſtarboard ſide, and alongſt a little to the ſouthwards of the outermoſt buye, untill you come within the Ooſter. When that Outdorp and Goeree are one in the other, then leave alſo the foreſaid markes of Reniſſe, and runne in right with Goeree, untill that you come by the ſecond buy; or (if there lye no buyes) untill that the Bommenee come a little without the Oxetayle, that is a point of Schowe, lying out a little to the weſtwards of Brewers-haven, ſayle ſo right in untill you bee paſt the Brewers-Haven. This Channell of Brewers-haven, is a broad and deepe Channell, very convenient for great ſhips, he that muſt turn in or out to windewards, may runne alongſt a good wayes on both ſides, as well of the outermoſt as of the ſecond buy, but to the ſouthwards of them it is deepeſt, and the common fareway. The third buye is a buy with a tayle, and lyeth upon a point of a tayle which off from the Ooſter, which you may not goe to the northwards of, untill it were very cloſe alongſt by it: all alongſt by the ſtrand of Schowen, it is deepe and ſteepe, you may runne cloſe by it from the outermoſt buye unto Brewers-Haven, there is nothing that can hurt you, the ſhowldeſt of this Channell is eighteen or nineteene foot, at leaſt a league without the land in the comming in betwixt the Ooſter and the Hill. Further inwards it is foure, five, ſix, and ſeven, and at ſome places ten and eleven fathom, as it is ſhewed in the Card by the numbers of Feet, and all at low Water.

The Keel, the Newdeep, the Velt, and the Roompot:

Men may run into Zierickſea through divers channels, through the Keel, the Newdeep, the Velt, and the Roompot. For to ſayle through the Keele, then run in as is before ſaid of the channel of Brewerſhaven firſt in by the marks of the Blenck and Reniſſe, ſo long untill that Ter Veer come to the weſtermoſt point of Schowen, called the Hoot, keepe them one in the other, or to the other, and run ſo in untill you come by the ſtrand, and then forth by it, and you ſhall find ſo in the Keel at the ſhowldeſt, 18 and 19 foot, & comming againſt the point of the Hoot, foure and five fathom. Betwixt the Hoot and the New-ſand (which falleth at the eaſt end at ſome places dry) run all alongſt by the land of Schowen, untill you come thwart of the ſouthermoſt cape of Schowen, edge then ſomewhat off from the ſhoare towards the Baniard, for to avoid a Share which lyeth off from Schowen, which you might ſayle within when you come out of the ſea. There lyeth a buye upon the point, wherby it is good to beknown: being paſt that, run all alongſt by the ſhoare untill you come to Zierickſea: ſomewhat within the buye, upon the point of the Share, there is lately laid another little buy for thoſe that wil ſayle that wayes out, for that they may not ſayle upon the eaſt ſide of the foreſayd Share.

The New-deep. For to ſayle in at the New-deepe, you muſt looke out for two ſtone fire-beakons, ſtanding a little to the ſouthwards of the foreſayd capes of the Channell of Brewers-haven, bring the innermoſt a handſpikes length to the ſouthwards of the outermoſt, and runne then right in with them, and then you ſhal runne in betwixt the Hill and the New-Sand in ſixteene, 17, and eighteene foot, goe in alongſt by the foreſayd markes, untill that you come by the ſtrand, and then you come into the Keele. If you bring the firebeakons one in the other, and ſayle ſo right in, you ſhall then runne over the tayle of the Hill in eleven or twelve foot. The Hill is a land ſomewhat flat, which men may come neare to the ſouth ſide by thier lead, but the Newſand is very ſteep, and the ſea breaketh very much upon it. When as that you come in by the ſtrand into the Keel, then run in alongſt by the ſtrand, as is before ſaid in the deſcription of the Keel.

The Velt. For to ſayle in at the Velt, you muſt obſerve theſe marks here under deſcribed: almoſt upon the ſouthermoſt end of Schowen ſtandeth a Tower alone in the field, with a cape upon it, called Weſtſchowen, bring that Tower a capſtone barres length to the ſouthwards of the foreſayd ſouthermoſt cape of Weſtſchowen and runne ſo right in, and then you ſhall runne through betwixt the Newſand and the Baniard, and ſhall finde upon the ſhowldes (thwart of the outermoſt poynt of the Newſand) twelve and fourteene foot, being paſt that, there will be againe fifteene, ſixteen, and eighteen foot, and by the ſtrand twenty foot deepe. When you come in by the ſtrand, runne all alongſt by it untill you come even to Zierickſea, as here before is ſaid of the Keel, and Newdeepe. When you runne in at this channell; you muſt take very good heed of the Banjaerd, which is very ſteepe upon the north ſide; cloſe to it, there is three, foure, and five fathom, but thwart of the foreſayd ſtrand, which lyeth of from Schowen ſixe and ſeven fathom deepe. The Newſand is indifferent flat on the ſout ſide, that you may borrow of it by your lead.

Veer-gat.

He that will ſayle into the Veer-gat, comming out of the Sea, hold Middelborgh a ſhips-length by weſt eaſt-chappell; this is yet of the north-Cats, and when you doe ſee Sortgeen, hold it alwayes a ſhips-length more ſoutherly then Cats, for the towers may not come over againſt each other, without comming to cloſe by the Banjart, whereof you muſt have a care, for the fore-floud falleth there croſſe-wiſe over along the Banjart, which is a ſteepe, ſhallow, and very dangerous Sand.

For to ſayle out of the Veergat, you muſt have a care of the priſon tower, which you may not bring by north the tower that ſtands at the head, or elſe you ſhould come to fall upon the Plate which lyeth over againſt the Leverhouſe, for before the Lever-houſe is it verry narrow, and thereby runneth a kreke, through which the ſtreame falleth ſtrong, the ebbe as well as the floud, the ebbe towards Schouwen and the floud towards Walcheren; you muſt hold alwayes Cortgeen a ſhips length more ſoutherly then Cats, then you doe come on the firſt Tunne; goe ſo forth from Tunne to Tunne, till you doe come unto the third and laſt; you may doe no harme on the Land of Walcheren; about the Polder lyeth a little Plate, called the Scots-man, though thereupon lyes a Tunne for a warning, the moſt depth is by ſouth the tunne, alſo with a ſharp winde you muſt have a care of the Room-pot; for the floud goeth very ſtrong into the Room-pot, hold it all along cloſe

behinde

behinde the land; it is there deepe enough, till Middelborgh comes in eaſtcappell, goe then weſt-northweſt in Sea, till without the Stonebench; comming out of the Weſt, and that you will be into the Veergat, bring then Domborgh by eaſt the watch-houſe of Domborgh, for to eſcape the Querens; hold then upon the land on; It is on the wall cleane and deepe, and you may runne there ſo cloſe by as you pleaſe; theſe Querens doe lye within the Reuteel, and is with low water 4 fathom deepe; or if you doe come from Fluſhing out of the Botkille or Fiſhere-gat, or the Deurloy, or otherwiſe out of the weſt, doe not come then ſo cloſe by the wall, when as you doe not ſee the watch-houſe of Domborg, or marke well upon the wood of Weſt-hoven, & upon eaſt-chappell: When as you can ſee through betwixt weſt-hoven and eaſt-chappell then are you free of the Querens, geere then the wall free; betwixt theſe querens and the land, there runneth yet a land-deepe, but is very narrow, you muſt runne ſo cloſe by the wall, that the land-ſea doth almoſt breake on you, it is not fit to runne with common ſhips through this place, except it were in time of great neceſſitie, for theſe Querens are very hard.

He that will take on theſe lands, muſt not ſpare his lead, for by the difference of the grounds he ſhall finde out whereabout hee ſhall come to fall, althrough he is without the ſight of the Land.

If you doe come to fall before the Maſe, you ſhall meete there a long flatneſſe, which is deep 13 and 14 fathom, when as the Maſe is ſoutheaſt and ſoutheaſt and by eaſt from you, and it dryeth up by little and little, yea by an halfe foot at once.

If you doe come to fall before Goeree then you ſhall meete no Bankes but ſome over-falling, with great raveling, though they are reaſonable deep, 13 and 14 fathom, and then is Goeree ſoutheaſt and ſoutheaſt and by eaſt from you. Schouwen upon the wrong ſide that is Reinſt by eaſt the blenke, and the Cape eaſt from you, and then are you open before the Brewer-havens-gat, and alſo from the keele unto Zierickſea. Coming out of the Sea, and that you doe fall here, you ſhall meete then the Stone-banke upon 6 fathom, you may be ſure thereby that you have Schouwen upon the wrong ſide, there by north doe meete no Bankes, and ſomewhat weſterly you ſhall finde it to be dryer.

Comming out of the Sea, and that you come to fall thus: that Middelborgh is in eaſt chappell or a little there by eaſt or there by weſt, you ſhall meete there 3 Bankes, firſt you doe meete Broad-banke, there you ſhall finde not leſſer then 10 fathom water, but thereon within is it againe 20 fathom deepe, this Broad banke lyeth about a mile from Stonebanke Seaward; The Second is eaſterbanke, and it is there 6 and 7 fathom deepe, and doth lye betwixt Broad-banke and Stone-banke, though Broad-banke next, and ſtretcheth along theſe whole coaſt, and thereon within is it againe 17 and 18 fathom deepe.

About an halfe mile within thereon you doe meete Stone-banke you ſhall finde there no more then 3 fathom water, and thereon within is it deepe againe 10 and 11 fathom.

Comming out of the Sea, and that you doe fall upon weſt-chappel, and that weſt-chappell is ſoutheaſt and ſoutheaſt and by eaſt from you, there you ſhal meete theſe foreſaid 3 Bankes: firſt, Broad-banke, which is there deepe 6, 7, and 8 fathom, and thereupon within is it againe 17 and 18 fathom deepe. The 4 Weeden is Qoſter-banke, the ſame is there 6, and 7 fathom deepe, but within thereon is it againe 24 and 25 fathom deepe, and there you doe meete Stone-banke, ſo ſteepe that it is not poſſible to leade thereon, for with one caſt you have 12 fathom, and with another caſt you have but 2 fathom, ſometimes 13, 14, and 15 foot water, here is the moſt dryneſſe; then ſtandeth Middelborgh by weſt Domburgh in the Roggen loafe, and is alſo very dry and ſteepe; Being over Stone-banke, and that you come thereon within, you ſhall finde there againe 21 and 22 fathom. Sealand may be ſeene, when you ſtand above upon the ſhip, upon 16 and 17 fathom, againſt Walcheren doth fall a third part of the floud towards the Land, and afterwards eaſt and by north.

When as you come to fal out of the weſt, ſo that Boeyens-Church ſtandeth by weſt, or on Church of weſt-chappell, there you ſhal find alwayes harde ground, and Ras up Raſſe upon 23 and 24 fathom, till you come right againſt the Raen; the firſt ſteke-ground, which you begin to eſpy, is cloſe by the Raen; Middelborgh on the downe or about halfe way the Sconce and the doune, or a dounne or two inward, there you ſhall finde all over ſteke-ground, till unto the Raen.

Brugge comming by weſt the Staker or in Liſwegen, you have there all hard ground, till upon 8 and 9 fathom, there you doe come in the faire field where the Sealands Fiſhers doe fiſh, and is all ſtekeground.

Brugge in Liſwegen, comming out of the Sea, then you ſhall meete there Rever, deepe 8 and 9 fathom, there betwixt is a little difference, but alwayes hard ground, till unto the ſmal Banke, there you ſhall finde no more then 5 fathom water, ſhee is very ſtraight or narrow, and ſo you ſhall in the Eaſtwele; this narrow Banke ſtretcheth from the Raen off from the weſt-ſide, ſo alſo as the Splete doth, and eaſt-wele is the laſt-holding of the Splete.

He that will ſayle into the Inward wheeling, may take on the Land, when as he thinkes, that he is paſt Eaſtende, running cloſe a long the Flemiſh ſtrand, ſo neare as you pleaſe, for it is there all over faire ground till you come before Heyſt, there you ſhall meet the horſe-marketh, hold then a ſhip, or 2 ſhips length, by north the Eaſt-downes of Caſant, for you may not bring S. Lambrecht on the Eaſt-downes of Caſant, for if you did you ſhould under ſayle the horſe marketh, and therefore you muſt keepe S. Lambrecht ſo ſtanding, for here is not much Ript, and it is here reaſonable deepe, for with bow water it is here at leaſt 18 foot water; follow ſo your courſe by the horſe-marketh along; comming in the Caſtle of Sluys, or within the Caſants downes there is the Ript very dry, and no more as 7 foot water, therefore bring Middelborgh then by eaſt Theefs-point, and hold that ſo ſtanding, the Caſtle of Sluys comming within the downes of Caſant, there goeth a point off from the Faſt-land, which is called the Krakeſand, therefore you muſt have there a care of the ſtrand, & come the ſame not to neare within a Piſtol ſhot, then you need to feare no more danger there; Alſo, thoſe are your markes in the ſailing out: when as you have Heyſt by eaſt the hight, then you may very well lead on to the Horſe-marketh, when as you are paſt by the Towne of Fluſhing, and that you will looſe to the flat, goe then not to cloſe by the Caſants ſide, for the Floers ſake, for it is there by north wide and broad enough, you may alſo lead as well to the Krakeſand.

The Wheeling.

He that will ſaile into the Wheeling, muſt bring the tower of Wenduynen in the Eaſterly ſhore, and hold that ſo ſtanding, till you are over Ript, and goe then eaſtnortheaſt on; Brugge comming in Liſwegen, bring then Blancken-bergh within the inward gollowſharde, following your former courſe; Brugge on Heyſt and Weſt-chappell on knocke, you may not well come there, or elſe you ſhould be to farre beyond the north, and you ſhowld come Engliſhpol too neare; But bring Brugge a maſt length by eaſt Heyſt and weſt-chappel on knocke then you have the right depth, and then yon are about halfe way in the wheeling, in the right farewater; Seeing Middelborgh, hold then the ſmalleſt Tower a fathom by ſouth the greateſt, or Fluſhing by north the Cittie-houſe. Within the cape lye 3 little downes, when as you have Middelborghs greateſt tower therein, and that you cannot ſee the ſmalleſt, hold it then ſo ſtanding untill Soutelande, when as you have Middelborgh in theſe three little downes, then you are alſo about halfe-way in the Wheeling; The tower in Middelborgh may not touch on the greateſt, or elſe you ſhould be to farre beyond the north, and come upon the Engliſh-pol, Fluſhing may not come on the Cittie-houſe, or elſe you ſhould be to farre beyond the ſouth, and come upon the French-pol, therefore hold theſe foreſaid markes of Middelborgh and of Fluſhing even wide from each-other, then you are alwayes about halfe way in the Wheeling, till the Caſtle of Sluys come by eaſt S. Lambrecht, then are you free from all Sandes, Reeves and dry places. From the French-pol there ſtretcheth a Riffe off about weſtnorthweſt, thereupon is but 8 foot water, and is very ſmall; the Caſtle of Sluys comming a little by weſt the Caſants-downes, there you doe meete this foreſayd little Riffe, the which can be underſailed from by weſt.

For to ſaile out of the Wheeling, bring Fluſhing even free on the north-ſide of the Cittie-houſe, and hold it ſo ſtanding, till you have Middelborgh in the 3 little downes, which doe lye next to the Cape, hold that ſo ſtanding til you begin to looſe the ſame, have then a care of the markes of Middelborgh, and Fluſhing foreſayd.

The Splete.

For to ſayle into the Splete, bring Blanckenbergh by weſt the uttermoſt gallow-ſhaerden, and hold it ſo ſtanding, till you have the knowledge of the Ript, runne then ſo along the way of the Banke eaſtnortheaſt in, Brugge a cable length by weſt Heyſt, and weſt-chappell on knocke, that is the right depth, and then are you about halfe in the Splete; Seeing weſt-

weſt-chappel on the firſt downes, or Middelborgh over the Cape, hold the ſame ſo ſtanding, till Fluſhing comes in the white wall; you may doe no harme with going inward towards Walcheren, ſo long as the mill doth not touch Fluſhing or that Fluſhing doth not come by north the mill. If you doe bring Blanckenbergh on the Gallowſhaerde, before that Brugge comes in Liſwegen, then you are to farre into the land, and to cloſe by the Ript.

Blanckenbergh on the Gallow-ſhaerden and Weſt-Chappell on the downes, then are you about halfe-way in the Splete.

Brugge in Liſwegen and Blanckenbergh an halfe ſhips length by weſt the utmoſt Gallowſhaerden, then you are alſo about the midſt or halfe-way in the Splete, and this is your beſt marke, and is alſo your next croſſe marke that you have.

The Deurloy.

Betwixt the Raſſen, and the dry Raen goeth the Deurloy in, upon the Raſſen ſtands no more then 3 or 4 foot water, and is very farre flat and hard ground, and the drye Raen falles wel 4 foote drye above water and is on the north-ſide ſo ſteepe, that the ſame is not poſſible to leade. When the Caſtle of Sluys comes in the eaſt downes of Caſant, then you may come there upon; For to ſaile in the Deurloy, you muſt have a care, that when as the Caſtle of Sluys ſtands in the Caſants Downes, then you are upon the drye Raen, but when the foreſaid Caſtle ſtands by weſt Caſants downes then you are free of the drye Raen, and when the Caſtle of Sluys by eaſt is free from the eaſt downes of Caſant then you are in a good way in the Deurloy; when as the Caſtle of Sluys ſtandeth a little by weſt the downes, of Caſant, then you may freely hold thereupon with a northerly winde, when you doe not fall to high by ſharpe winde, and run ſo through on the northſide of the Sloe, till Weſt-Chappell comes on the firſt downe, then you are in a good way in the Splete. For to ſaile into Deurloy comming out of the weſt, hold Weſt-chappell betwixt the mill, and the Sconce about halfe way or the midſt by north the Soutland till the Caſtle of Sluys comes by eaſt the eaſt-downes of Caſant or S. Anne from by weſt on the Caſants-Downes, for to runne ſo by north the drye Raen, till Weſt-chappell come in the firſt downe, hold then eaſtſoutheaſt on, right upon Fluſhing.

For to ſayle from Fluſhing out of the Deurloy hold the tower in the white wall, till the Caſtle of Sluys comes within a ſhips length on the eaſt-downes of Caſant, hold that ſo ſtanding till Weſt-chappel comes about halfe-way of the mill, and the Sconce, goeth then northweſt out of the Deurloy. You may alſo have a care upon this following: When as the tower of Fluſhing doth touch the wings of the mill, then you are to cloſe by the Raſſen, ſo much as the tower of Fluſhing is free of the mill, ſo farre are you free of Raſſen, till Weſt-chappell is free of the Downes, goe then weſtnorthweſt in Sea, when as the foreſayd wing of the mill is even free from the tower of Fluſhing; there you have with low water not leſſer then 22 foote hard ground.

For to ſaile into, the Deurloy, comming, out of the north, bring Weſt-Chappell about halfe-way the Sconce and the mill, till you are within the Raen, when as the Caſtle of Sluys comes within the eaſtdownes of Caſant or S. Anne by weſt on the downes of Caſant, till weſt-chappell comes within the firſt downe, goe then right on upon Fluſhing, there have you the deepeſt water. By darke ſight ſeeke freely to kome on the Raſſen which are farre flat, as alſo the Geer, & hold alwayes one ſide, the dry Raen is alſo on all ſides flat, except there whereof we before have made mention, ſo that you can doe no harme if you have a care of the dry Raen, which muſt not onely be done by the lead, but alſo by the dividing of the floud, for the ſtreame doth eaſily miſleade.

The Sloewe.

Betwixt the Raen and the dry place goeth the Sloewe in, comming out of the Sea when as you have Middelborgh in the Slop of Sout-land, and Brugge in the Staecker; you are then in an open Channell from theſe Sloewe it is a very good marke, both for the Sloewe and the Deurloy, but you can ſcarce Middelborgh on the eaſtſide of the Slop, without coming to cloſe by the dry Raen; comming out of the Sea, and that you doe fall below at the Deurloy, for to runne by weſt the dry Raen, through the foreſayd Sloewe, bring then the Caſtle of Sluys about halfe way in the channell of Sluys there you ſhall finde with low water, no leſſe then 22 foot water; for to catch this channell or hole from without, bring Brugge in the Staecker, or Weſt-chappell in Knocke, for theſe markes doe gree juſt one with another, hold this ſo ſtanding, till Weſt-chappell comes in Walcheren on the firſt downe; you are then in a goot way in the Splete.

And if by darke weather or againſt the evening that you were afraid to runne out of the Splete and that you would faine bee without all oule neſſe or dirt, then you need not to be afraid of theſe Sloewe, for ſhee is broad and wide; from the Caſtle of Sluys or on the feerſand of Caſants downes, you may not well come there, (and againe to the weſt) till the Caſtle of Sluys comes on the feet-ſand of Flandres, and is on both ſides flat, upon hard going ground. In theſe weſt-holes, viz: the Inward-wheeling, Wheeling and the Splete, runnes the Ebbe a long time Southward, ſo that you right floud goeth not above 4 houres right; therefore you muſt have a good care of theſe things. In the foreſayd weſt-holes maketh a ſoutheaſt moone a fore-floud; that water which you have not got with a ſouth moone, you ſhal not get it elſe.

Bot-Kille.

When as you have the Cape even free from the downes, then are you open before the Bot-Kille, or when as you have weſt-chappell the length of a wind-beam by north the mill, then you may with a Shipp, which goeth 12 or 13 foot deep, hold on upon the land with low water; you doe runne then over the Taile of the norther Raſſen, but you come with a deep-going Shipp in the right depth, hold the little church in the mill one over againſt another. For to ſayle into the Bot-Kille, bring Boyens Church a little by weſt the mill; it is a ſhort Leet or verlaet, and a ſhort marke; you may bring Boyens-Church well about halfe way the Sconce and the mill, but Boyens-Church in the mill there have you the deepeſt water, but then are you alſo cloſe by Calo; Boyens-Church being a little by north the mill, then are you cloſe by Calo, which is a ſteep hard Sand, and you cannot lead thereon. Comming into the mouth, hold Fluſhing by north Theefs-point, becauſe you ſhould not come to cloſe by the little Bench, called the Geer; goe cloſe along behind the land, it is there deepe enough, before the Bot-Kille is 24 and 25 fathom hard ground, Raſs op Raefs, and it dryes up by 3 and 4 fathom, till you come upon 8 and 9 fathom, there you have clay-ground ſo long till you are by the Raen. Before the Fiſhers-hole have you upon 16 and 17 fathom ſoft ground, and it dryes up by little and little.

In theſe Pink-Sea maketh a ſouthſoutheaſt moone a fore-floud; and when the moone is ſouth and by weſt, then goeth the floud firſt right in Sea.

Fiſhers-gat.

For to ſayle into the Fiſhers-gat, bring Boyens-Church on the eaſt-end of the new Dike, you are then in the right deepe; you may bring weſt-chappell in the eaſt-end of the new Dike, but you may come then no more northerly. For to be free of the Querens, Boyens-church may not come on the countrey-corn-houſe, or elſe you ſhould come to cloſe by Calo, but Boyens-Church upon a ſhips-length on the Corne-houſe, and not nearer, for Callo is very ſhallow and ſteep; This country Corne-houſe ſtandeth about a ſhipps length by eaſt weſt-chappell. When as the floud begins to go in Sea, then have you in this Fiſhers-hole a fore-ebbe and when as the ebbe begins to goe right in Sea, then is in this Fiſhers-hole a fore-floud, this Gat or Hole is wide and ſhort, and deep all along the land till unto Fluſhing. If you were ſailed into the Fiſhers-hole or the Botkille, and did geth an eaſterly winde, runne then unto the Sloewe, which runneth through betwixt the norther and the eaſterly Raſſen; then marke thereof is: Eaſt-chappel in weſt-chappell, there you may come alſo upon the lead till in the Deurloy, for to looſe alſoe up unto Fluſhing, here in this Sloewe is not leſſer (with very low water) then 12 foote water. If ſome doe lye before anckor under Stone-bench, and that they muſt chap off the anckor or ſpill ſomething of it, they muſt have a care of the Reuteel, upon the which (with very low water) is not leſſer then 4 fathom water; ſeeke the Reuteel on, and hold the Streake of the Reuteel, till you begin to ſee the Rogenbread, the which doth ſhew more plaine then the Downes of Domborgh; doe not turne from the land when as you have the Downes of Domborgh ſouth from you, or the Roggenbread ſouth and by weſt from you, but hold al cloſe along by the land, ſo neare by as you pleaſe, becauſe you ſhould not come to cloſe by the Banjart, and goe ſo forth upon the lead into the Veergat, all along cloſe by the land; it is there deepe and cleane, till you come behinde

the poynt: If you ſhode to be good to chap off your ancker, ſtay then ſo long (if you can) till the ſtoud goeth right; this foreſayd Reuteel gives you a warrant to have a care of the Querens, for the Querens doe lye within this Reuteel.

The Flemish Coaſt.

Flanders is a dou ny land, and full of little hils, with many towres along the Coaſt, ſtretcheth almoſt weſt-ſouthweſt unto Calis.

1. By weſt the Sluys-gat comes a tower, and is blunt and thick, called S. Anna.

2. Is knocke a ſteepe or ſharpe tower.

3. Is weſt-chappell, which is a blunt tower with a blunt cappe thereupon.

4. Is Heyſt, a long ſteepe tower, higher then knocke.

5. Is Liſwegen, a thicke blunt tower, the thickeſt therabout. Betwixt Liſwegen and Blanckenbergh have you the gollow ſheerde.

6. Blanckenbergh is alſo a thicke tower, higher then Liſwegen, but not ſo thicke.

7. Bruggelingen are two high ſteepe towers, which doe lye into the land thereupon followeth the Sconce of Blanckenbergh.

8. Is Wendoune; a thicke blunt Tower, without a cape, right contrary all former deſcriptions of the Sea-bookes.

Of the tydes and courſes of the ſtreams.

Before Brewers-haven, a S.S.W. and N. N. E. Moone maketh high water.
In the Channell of Brewers-Haven a ſouth and by weſt Moone.
At Ter-Veer a S. S. W. and N. N. E. Moone.
In the Veer-gate a S. and N. Moone.

It is not good to runne in at Veer-gat, eſpicially with a ſoutherly or ſouthweſt wind, before that the ſtood be halfe ſpent, for the after-ebbe, and the fore-ſtood fall thwart over the Baniaert hard in at the Roompot, towards the land off Schowen, but when the ſtoot is halfe ſpent, then it falleth right in at the Veer-gat. When the Moone is Southeaſt, or northweſt, then the water is there already two third parts ſtowen.

Like as it is here before ſaid of the Maſe and the Goerees-gat, ſo alſo here before the channels of Brewers-haven and Ter-Veer the ſtood turneth about with Sunne, ſo that the after-ſtood falleth in the channels, and then afterwards turneth about to the ſouthwards, and becommeth a running ebbe, but the after-ebbe fall right out at the channels thwart into the ſea, and then with the fore-ſtood about againe to the northwards.

Before the Wielings a ſouth and by weſt and a S. S. W. Moon maketh the higheſt water.

At Flushing and Ramekens a S. S. W. Moone.

At Weſt-chappell on the land of Walcheren, a ſouth and north Moone maketh high water. When the water is a halfe houre fallen, then the tyde beginneth to fall out there, and when it is ſtowen a halfe houre, it beginneth to fal in: but before the Botkill it beginneth too goe there firſt an houre before the loweſt water, but it falleth long at ſea. In the Splete, & over the ſhowlds lying therabouts, the tyde turneth about againſt the Sunne, & at laſt falleth in at the channels. A ſouth and north Moone maketh there the higheſt water. The fore-ſtood falleth over the ſhowlds there towards the land. When the Moone is about eaſtſoutheaſt, or that the water bee about two houres ſtowen, then it beginneth to turne towards the ſouth, firſt ſouthſouthweſt, and then paſt the ſouth towards the eaſt, untill that the Moone be ſouthſoutheaſt, and then the ſtood falleth to the eaſtwards. When Blanckenbrough ſtandeth about ſoutheaſt and by eaſt from you, from thence to the eaſtwards, you ſhall not finde the tydes to turne about.

Againſt Zealand in the fare-way a third part off the ſtood falleth towards the land, and afterwards eaſt and by north. Men may ſee Zealand from the poope in 16 fathom.

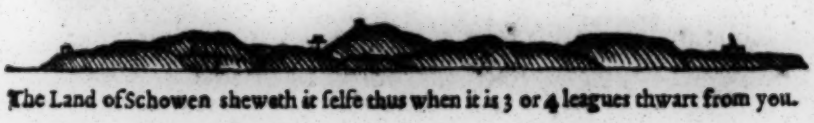
Courſes and Diſtances.

From Flushing to Blanckenbrough neareſt Weſt ſouthweſt. — 9 leagues
From Blanckenbrough to Oſtend ſouthweſt and by weſt, — 2 leagues.
From Flushing to the north Forland, W. ſomewhat ſoutherly — 15 leagues
From the Wielings to Dover w. ſ. w. — 26 leagues
From the Wielings to Layo-ſtaffe or Yarmouth, n. w. and n. w. and by weſt 38 or 40 leagues.

Heights.

Flushing, Rammekens, and the ſouth coaſt off Walcheren lye neare in 51 degrees and a halfe.

How theſe Lands doe ſhew themſelves at Sea.



The Land of Schowen sheweth it ſelfe thus when it is 3 or 4 leagues thwart from you.



Thus sheweth the Coaſt of Flanders from Blanckenbrough eaſtwards, when you ſayle in or out at the VVielings.



VVhen you are before the Channell of Brewers Haven, the land of Schowen sheweth it ſelfe thus.



Thus sheweth Walcheren when you are in the Doorloy, or before the Splete.

The Third Demonſtration,

Which unfoldeth,

The Coaſt of Flanders, from Wendowne to the Heads about Treſport, together which the Coaſt of England, the Promentory of Dover, and from Dover to Fierley.

BEtwixt Wendoune and eaſt-ende lyeth alſo a little ſteepe tower, called Ian Davids little tower.

Afterwards followeth the towne of Eaſt-end, and hath a little ſteepe tower. When Blanckenbergh is E. S. E. from you, from thence E. ward begins your running of the ſtreames, ſtretcheth againſt the Sunne for to turne, but from thence weſtward you ſhall finde no more turning ſtreames.

Of the Flemmish Bankes.

The ſand. All the Sands which doe lye betwixt the hole of Sluſe and Calis, are called the Flemmiſh Bankes; whereof the firſt is the Sand, being very hard Sand, from the Horſe-marketh upon 2 fathom, and ſtretcheth ſo along the Coaſt upon 3½ three and 2½ fathoms till you are paſt Ooſt-ende, there is ſouthward, betwixt the land and the Banke 4, and 4½ and 5 fathom water, by north is the right fare-water, from the Wheelings, called the Kute, there is with low water 5, 6, and 7 fathom water; about a league and a halfe, thwart from Ooſtende lyeth the Rip or utmoſt Bancke, there is no more then 4 and 3½ fathom water, upon Geeſe, on the Eaſt-end of the towne of Ooſtend, and about halfe way unto Liſwegen, betwixt the Downes and Blanckenbroug, you are then upon the Rip. Kute. The Rip.

Betwixt the Rip and the land lye alſo 2 little plates, of 3 and 2½ fathom.

Before Oſtend begins a Banke, which ſtretcheth along the Coaſt till before the Haven of Newpoort, thereupon is 2 and 2½ fathom water, betwixt the land and the Banke is it 4, 5, 6, and 7 fathom deep.

Thwart off by north theſe Banke lyeth Beane-land of 2 fathom water, and upon ſome places 2½ fathom, there by weſt; and right under New-port, lyeth the Strooms of two and three fathom. Beane-land. Strooms.

By eaſt of Newport goeth a little Riffe from the wal, whereof you muſt take good care. Betwixt Dunkerck and Newport doe lye 6 Bankes, whereof the firſt is called Brothers-banke,

VLAENDEREN

Oostende

Nieuport

Wynoobergen

Duynkercken

Grevelingen

De Ruytingen

De Pellers

Gecimob

Sandwich

ENGE

...uſte van
...en Vranckrijck.
...n tot Tresport. en
Engelandt vande
...t de Cingels
Beſchreven door
A. Colom.

Beloigne
Picardie

Calais

Romney

Winkelsee

...es Marines de
...n et le pas de Calai.

L A N D T

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banke, and is of three hookes, lyeth next the Brothers and the Cloyſter at the Downes and very cloſe by the land, ſtretcheth off from the wall, about weſtnorthweſt a league in Sea; you may runne through betwixt the Brothers banke and the land upon 4 and 5 fathom with low water, but you runne there commonely round about weſtwards, when as you ſayle along Flanders, within through the Bankes.

Cams. The ſecond is the Cams, which doth lye by weſt the Brothers Banke, the ſame is 3 fathom deepe, on ſeveral places of 2 and 1¾ fathom; you may make Road betwixt the land and theſe Banke upon 7 and 8 fathom for all windes.

Norther-Cams. If you doe runne by north the Cams beyond the weſt, you runne then againſt the Killen, or on the norther Cams, there is ¾ fathom water, as alſo on ſeverall places not ſo much, and a little by weſt there you have the Brake, which ſtretcheth in a Bight from the norther Cams, till you are cloſe on the Splinter before Dunkerke, ſo that you runne ſo much weſt as by eaſt, thereupon is 1. 1¼ and 1½ fathom water, but upon the weſt end is it deeper, ſo that with low water there is three and four fathom; depth within the Brake is it tenne and eleven fathom deepe, there runnes a Cloave through of 12 or 10 foote deepe. The Brake.

Small-banke. By north the Cams and by eaſt the norther Cams, lyeth the Small Banke of 2 and 3 fathom water, but upon the Tailes is it above 4 fathom deepe, betwixt the Small Banke and the Cams it is wide and broad, there is 8 and 9 fathom depth.

Stone-banke. By north the Small Banke lyeth the Stone-Banke, which hath on the eaſt-ſide an hooke, and ſtretcheth almoſt till you are paſt New-port, is on the weſt-ſide three and four fathom, and upon the ſoutherly Taile of the hooke on the eaſt-ſide 3 fathom, on the norther Taile of the hooke 1½ fathom deepe; on the north-ſide lyeth a Raſſe in the ſtone-banke of 3 foot water, betwixt the Smal-banke and the Stone-banke is 8 and 9 and 7 fathom water, and is reaſonable broad betwixt both.

Calbanke. Calbanke lyeth by north the Stone-banke, and is in the midſt 2 fathom, and upon the Taile 6 fathom deepe, in the midſt of the Cal-banke lyeth a little Banke, which is called litle Smal banke, thereupon is but 3 foot water, betwixt Stone-banke and Cal-banke is it very roome, you have there 10. 9. 8. and then againe 7 fathom water, ſtretcheth with the eaſt-taile unto the utmoſt Banke, the Cloave betwixt both is called Trop-zeel, which is the right fare-water to runne beyond through betwixt Beaneland and Stream, there in the fare-water is it 12. 11. 10, 9. 7. 6. and upon 5 fathom deepe. Little Small-Banke. Trop-zeel.

By north the Calbanke lyeth alſo a great Banke of 8. 9. and 10 fathom, whereupon doe lay ſome Raſſes of 5 and 6 fathom water.

There doe lye alſo 5 long Bankes, along Flandres, to wit, when Grevelingen, is ſouth and ſouth and by eaſt from you, then are you next the weſt end of the Bankes, and when Newport is eaſt and by ſouth from you, then are you next the eaſt-end, they are very long, betwixt every one goeth a Channell through, each of a ſundry depth. Markes of the Flemmish Bankes.

About 4 leagues north and by eaſt, and northnortheaſt from Calis, and N.N.E. from Calis-Cliffe lyeth the utmoſt Banke, called the Cliffe, is at the dryeſt place about 8 foote deep, by north off from the Cliffe, towards the Sea, is it 23 and 24 fathom deepe, upon the ſouth-ſide, towards Ruyting, runneth a Channell through, called the Polder, and is wide and broad; of 20 and 23 fathom deep. The Cliffe.

Ruyting. The ſecond is called the Ruyting, lyeth from Calis northnortheaſt, and from Calis Cliffe northeaſt and by north, about 3¾ leagues, and it is there 5 or 6 fathom deep, upon the ſouth-end lyeth a Polder thereupon is but 1½ fathom water, when great Caſſell comes over againſt Mardike, then you need not to be afraid of the Ruyting, but Mardike muſt not come more weſterly, otherwiſe ſhowld you ſayle upon the aforeſayd Polder betwixt theſe and the third goeth a Channell through, of 18 and 20 fathom.

The Dike. The third Banke is called the Dike, lyeth from Callis-Cliffe northeaſt 1½ league, is upon the north end 4 and 5 fathom deep, but upon the ſouth-end 5. 7. and 8 fathom, upon this Banke lyeth alſo a Polder on the ſouth-end, but of one fathom depth; Wynoxbergen juſt by eaſt the great Caſtle, you runne then right upon the Polder, theſe Bankes are very dangerous, for the Ruyting, lyeth almoſt in the fare-water, betwixt this Banke and the fourth, goeth alſo a Channel through, is firſt by north 12 fathom, and begins further beyond the ſouth to be 9, 7, fathom, but is ſome-what dangerous to runne through, for you have the Dike north, a little beyond the ſouth you have the Rateling, is at the higheſt nine fathom, and runneth upon 4 fathom, and ſometimes leſſe, and ſomewhat further beyond the ſouth, you come one againſt a Polder, Rateling. Ratel-banke.

which lyeth upon the Ratel-Banke, whereupon is but 4 and 4½ foot water.

The ſouth Banke is called the Ratel-banke, lyeth from Calis Cliffe northeaſt, and northeaſt ſomewhat eaſterly 3½ league, is deepe 3. 4. 5 and 6 fathom, upon the ſouth-end lyeth alſo a dry Polder, of 4 or 5 foot water, with Spring-ſtream fall thoſe Polders drye, betwixt the Ratel and the Dike have you the Rateling of four, five, ſeven and nine fathom, and runnes unto the Dike.

By eaſt the Ratel-Banke, to wit, betwixt the ſame and the Broad-banke, goeth alſo a Channell through, the end is wide and broad, and on the weſt-end runnes it reaſonable ſmal or narrow, is throughout of 14 unto 16 fathom water.

In all theſe channels you may ſayle up and downe, betwixt the foreſayd Bankes, from the one in the other, and ſett betwixt the Bankes where you pleaſe.

Great Caſſell on Mardike alſo you may freely runne over the Dike and the Ratel-banke, without hindrance on the Polder.

Broad-banke. The fifth is the Broad banke, lyeth from Calis-Cliffe, northeaſt and by eaſt ſomewhat eaſterly, is upon the ſouth-end, 4, 5, 6, 7, and 8 fathom, hath on the eaſt ſide a great corner, ſhooteth with the northerly wind beyond the ſtone-banke, almoſt unto Cal-banke, and is upon the eaſt end of 4 unto 3 and 2½ and 2 and 1½ fathom, the ſouther taile of the corner runneth cloſe unto ſtone-banke, not withſtanding there is a good paſſage, (for to runne through with ſhipps) of 12, 11, 10, 9, 7, and 6 fathom, upon the taile is it from 2 unto 2½ and 1 fathom, Smail Sinten, a little by weſt the great Caſtle, you ſhould runne there right in the middle upon a Polder which lyeth upon the Broad-banke, and is almoſt a leagues length, alſo he that is upon the Ratel banke, hath throughout no more then 4 and 3 foot water.

Betwixt the Beacons and the Broad-banke, is it wide and broad, and 14, 12, 10, 9, 8, and 7 fathom deepe.

The Splinter ſhootes off betwixt the wodden Wambus and the Haven of Dunkerke from the Flemmiſh Coaſt, and runnes ſo forth in Wilbert-ſand, unto the Broad-banke, you can come through the Splinter on ſeverall places, which you may reade in the Deſcription thereof.

By weſt the haven of Greveling lyeth a Banke or flatneſſe along the wall, and ſtretcheth a great deale off from the land ſeaward, till cloſe by Calis, called the New-land, you may runne thereby along or over upon 5, 4, and 3 fathom, ſo as you pleaſe.

The haven of Calis falleth with all Ebbes very drye, and with high water, upon a dayly Ebbe, is there not leſſe then 3 fathom water. For to ſaile therein, keep the mill (ſtanding on the eaſt-ſide of the towne) right over the eaſter-Head, and runne ſo cloſe by the Eaſter-head in, and leave the Caſtle on the weſt ſide from you, from the Weſter-head runneth a little Riffe off, therefore you muſt have a care thereof. Comming within the Weſter-head, you muſt turne up weſtwards, till you come in the Kuype, where you may ſit drye with low water. In the night, when it is Ebbe ſtand there two fire-beakons, you may runne thereupon in. It is not good to runne into this hole before the higheſt water, becauſe of the ſtrong ſtreame, which runneth therein with the floud, for you muſt have a care of the anckors of the Ships which lye there within. It is there within dangerous and bad to lye, eſpecially with a norther wind, which blowes there open in.

Thwart from the weſter-head of Calis lyeth a Banke of 2 fathom, you may run through betwixt the head or Meyland and the ſame Banke upon three fathom with halfe floud, the Banke is of two fathom depth. You may ſet it under Calis-Cliffe, on the eaſt-end, upon 10 fathom, but on the weſt end lyeth a Stone or Rocke under water, a little Canon-ſhot from the land: Calis Cliffe lyeth betwixt Calis and Swarteneſſe.

The coaſt of Engeland from Dover to the north Forland.

Betwixt Callice and Dover amiddeſt in the fare-way, (or ſomewhat nearer the French ſide then the Engliſh) lyeth a narrow bancke of foure leagues long, lying about N.N.E. and ſouthſouthweſt alongſt the land of Blackneſſe, being called the Vaen, and by the Dutchmen called Vrow-ſand, of 1 and a half 2. 3. 4. 5. 6. 7. & 8. fathom depth, & runneth to the ſouthwards toward; the land of Bulleyn. Weſt and by ſouth from Callice-cliffe, and ſouth and ſouth and by eaſt from Dover, is the ſhowldeſt of it, at low water not deeper then ſixteene or ſeventeene foot. On both ſides of this banck, as well alongſt to the eaſtwards as to the weſtwards of it, it is 20, 22, 23, and

24 fathom deepe. Men may anckor before Dover for a north and northweſt wind, right againſt the Caſtle, in tenne fathom, is the beſt road, and cleane ground. For to ſayle into the Downes from the ſouthwards, you muſt run about by the ſouth Forland, within two cables length alongſt by the land, and anckor thwart of the middlemoſt Caſtle in 7, or 8 fathom.

The ſouthermoſt poynt of Goodding, and the ſouth Forland lye N. E. and S. W. aſunder.

Goodding. Betwixt Goodding and the Valley in the land of the north Forland, called Ramſgat, lye two ſhowlds, whereof the weſtermoſt is called the Quernes, and the eaſtermoſt the Brakes.

For to ſayle from Dover (through within the Goodding, betwixt the Goodding and the Brakes) to the north Forland, you muſt goe on north and by eaſt ſo long untill that the mill upon the north Forland come to the weſt ſide off the Valley in the north Forland, then goe yet north and by eaſt, and northnortheaſt, untill that the little ſteeple upon the North Forland come to the eaſt-ſide of the foreſayd valley, then you ſhall bee to the northwards of the Brakes, and then the little flat ſteeple upon ſouth Forland commeth to, or right over the third white Chalck-hill to the Northwards of the ſouth Forland, that is a direct long marke; for to ſayle through betwixt the Brakes and Goodding, as well when you come from the Northwards as from the Southwards.

Brakes. For to ſayle through within the Goodding from the northwards, you muſt not come nearer the Brakes then in ſeven fathom, and ſet the ſouth Forland ſouthſouthweſt from you, and ſayle then ſo right with it, and then you ſhall runne alongſt the beſt deepe. VVhen that the flat ſteeple upon the North Forland ſtandeth in Ramſgat or the Valley, then you ſhall be thwart of the Brakes, and when the mill commeth in Ramſgat, you ſhall be to the ſouthwards of the Brakes.

VVhen you lye in the Downes, and that the inner poynt of the cliffe off the ſouth Forland lye ſouthſouthweſt from you, then the Quernes lye north and by eaſt from you, and the Qgernes. N. end of Goodding N. E. from you.

The north end of Goodding, and the poynt of the north Forland lye ſoutheaſt and by eaſt and N. W. and by W. a league and a halfe aſunder.

For to ſayl through betwixt the Brakes and the Quernes. For to come from the northwards into the Downes through betwixt the Brakes and the Quernes: there ſtandeth a Church upon the high land of the ſouth Forland, to the northwards of it, which is a flat ſteeple, and the church ſomewhat great of body, and there are three Caſtles upon the ſtrand of the Downes, you muſt bring the foreſayd Church with the flat ſteeple right in the middeſt betwixt the two ſouthermoſt Caſtles, and then you are in the fareway in the middle of the channell, and that wil ſerve for a leading mark to run through betwixt the Brakes and the Quernes, and the courſe lyeth through S. S. W. If the winde bee ſoutherly, that you muſt turne to windwards through, runne not further over to the eaſtwards then that the foreſayd Church come within 2 ſhips length of the ſouthermoſt caſtle, for if you ſhould bring them neerer, or together, then you ſhould run upon the brake, and being caſt about, run not further over the weſtwards then that the foreſayd Church come within two ſhippes length of the three, for if you ſhould bring them neerer, or together, you ſhould run upon the Quernes, and theſe markes will ſerve to turne to windwards through betwixt the Brakes and Quernes either from the northwards or the ſouthwards. The Brake is ſteep, being 5 fathom cloſe alongſt by the ſide of it, and in the middle of the channell is but 15 foot at low water, ſo that it is deeper by this ſide of the Brake, then in the middle of the channell. As you turn to windwards, and run over to the eaſtwards towards the Brake, as ſoon as you muſt caſt about, or els you ſhould be againſt the Brake: the Querne is flat, but nevertheleſſe as ſoone as you finde it ſhowlder (in running over to the weſt wards the Querne) then 15 foote, you muſt caſt about again, and ſo turn through. About halfe a league from the north end off the Goodding to the ſouthwards, lyeth of a flat tayle or ſpit of ſand to the weſtwards from the Goodding, a great musket shot of, and falleth dry a good wayes of at low water, which maketh the channell there betwixt the Goodding and the Brake very narrow, the thwart markes of this taile of ſand are theſe: up within the land, a little to the ſouthwards off Ramſgate, ſtand 3 or 4 high trees together, when theſe trees doe come right over the ſouthermoſt end of the cliffe that lyeth alſo a little to the ſouthwards of Ramſgat, then you are thwart of this foreſayd tayle of ſand, as ſoon as you ſhall bee paſt it, then you ſhall have more roome to turne to windwards, and may run further over to the Godding.

Thwart markes of a tayle of ſaud, lying of from the Goodding

For to run about a ſeabord of the Goodding.

For to ſayle from Dover without the Goodding to the north Forland, you muſt keep the poynt to the weſtwards off Dover without the ſouth Forland, and goe on northeaſt untill that the north Forland northweſt and by weſt from you, then you may boldly run to the north Forland and anckor before Margate, or where that you ſhall thinck it beſt, but thwart of the ſteeple, where the mill ſtandeth by, is the beſt roade. Or when the poynt of the north Forland lyeth ſouthſouthweſt and ſouthweſt and by ſouth from you, there is alſo good riding in eight or nine fathome. Betwixt Margate and the Reculvers, men may anckor every where in ſixe or ſeven fathom at halfe flood.

Betwixt the Querens and north Forland men may alſo run through to Sandwich, there runs of a little Stone-banck from the ſhore, called the Fourefoot, betwixt that and the Quernes it is at halfe flood two fathom deepe. The Quernes are lately growne much leſſe, and ſhifted, ſo that the north end of them is allmoſt gone.

About a great league to the weſtwards off Callice cliffe, lyeth Blackeneſſe, a fowle out-poynt, thwart of it lye many rocks alongſt the ſhoare. From Blackneſſe to the River off Bullen, lyeth the coaſt ſouth and by eaſt three leagues, a league to the ſouthwards of the Neſſe, the land falleth ſomewhat in with a faire ſandy Baye. In this Baye lyeth a Fiſher village on the coaſt, thwart off it in the ſandy Baye is a very good roade for eaſterly windes, in 5, 6, 10, 15, and 16 fathom, according as you will lye farre from the ſhoare. For to anckor there, you muſt bring the ſteeple off the village over the middeſt of the houſes. This place is called S. Iohns road. A little to the northwards of that foreſayd Fiſher village, ſtands a mill with ſome houſes, from thence to the northwards you may not anckor, for there the ground is fowle and ſtony. To the ſouthwards of the Roade towards the River of Bullen, lye alſo ſome little rockes alongſt the coaſt, which you muſt not come very neare to.

Blackneſſe.

S. Iohns Roade.

Upon the north poynt of the River of Bullen ſtandeth a high thick Tower, called a Tour d'Ordre, by ſea men the Old-man, a ſpeciall mark for to know the River by. About an Engliſh mile to the northwards of this Tower, a litle mile from the ſhore lyeth a litle ſuncken rock under water, where a Huye or Smack may not goe over.

Tour d'Ordre, Old-man.

Suncken rock.

Upon the ſouth poynt of the River of Bullen ſtandeth a ſtone wall, and upon it a great Beakon of a maſt, thwart off it from the ſouth poynt lyeth off a little riffe or ſhowld, that you muſt ſhun, and run cloſe aboard alongſt by the Head, which lyeth at the north poynt, and hath been there lately made. When you are come within this Head, you muſt preſently let fall your anckor and ride there; It is a tyde-haven, there men muſt goe in at high water, and at low water lye drye upon the chindle. Without, before the River, lyeth a banck, men were wont from the ſouthwards to run in over it in two fathom, and from the northwards in three fathom but it is now to the ſouthwards deeper through the ſcouring of the water alongſt the foreſayd Head, which is made at the north poynt.

Bullen.

From the Oldman, or the River of Bullen to Somme is the courſe ſouth about eleven leagues, between them lye alſo two other Rivers, Cauche and Auty, upon the firſt lye Eaſtaples & Monſtreu, there you muſt goe in amid channell at the higheſt water, within, it falleth altogether drye at low water.

The Somme.

Men may ſayle into the Somme, through two channells, from the eaſt poynt called the Eaſt Downe, lyeth off a ſand thwart before the channell; to the weſtwards off that riffe lyeth alſo an other great banck, between them goeth in the Eaſter-channell. For to ſayle in there, bring S. Valery a cables length to the weſtwards of the weſt poynt of the river, called the Oordell, & run in thereupō, until you come to the land at that foreſayd weſt poynt; & from thence cloſe alongſt by it, or as ſoon as you get againe deeper water over the banck, then up eaſtward towards the Beacons. From the poynt of the Oordel lyeth of to the N. wards a little riffe, upon the end of it lyeth a buye which you muſt leave on the ſtarboard ſide, and run in cloſe about to the N. wards of it. From the point of the Oordell upwards, it is ſet all alongſt with beacons, you muſt run alongſt cloſe by them, until you come within the poynt of S. Valery, where you muſt anckor, and lye every tyde dry. The ſand there within do ſhift ſo often, that they are not to be deſcribed for alwayes.

For to ſayl into the Somme.

For to ſayle into the weſter-channell, comming from the eaſt or the north, you muſt run alongſt by the banckes in ſix or ſeven fathom, and not neerer, they are ſo ſteepe, that a ſhipp ſitting faſt againſt them with the fore-ſhipp, at the ſtern hath three fathom. Comming towards the land at the end of the bankes, you ſhall finde a buye. Or els if you come from the weſt, and bring Crotoye a cables length within the Oordell,

For to ſayl into the weſter-channe.

Oordell, and ſayle ſo right in, you ſhall finde the foreſayd outermoſt buye. Beſides this, there lye three other buyes, whereof that foreſayd buye on the poynt of the Oordell is the fourth, and the innermoſt: you muſt leave them all on the ſtarboard ſide towards the land, and runne alongſt by them to the northwards of them.

Theſe channels and ſands there within all untill paſt S. Valery) fall at low water altogether drye, the buyes alſo fall drye, that men may goe by them; at halfe flood with a ordinary tyde, there is no more then two fathom water, it is not good to goe in there before that two third parts of the flood bee ſpent. With an ordinary tyde it floweth there five and ſixe fathom, but with a ſpring-tyde ſeven fathom up and downe. At high water and ſpring-tyde, a man may goe over all the bankes and ſands with eight or ten foot water: five leagues upwards lyeth Abbeville.

Thwart of the Somme, it is farre off into the ſea ſhowld water, five, ſixe, ſeven, eight, nine and ten fathom, three or four leagues of into ſea: he that commeth from the weſt, and findeth himſelfe in darke and miſly weather to bee in ſuch ſhowlding, may bee well aſſured, not to bee farre from the Somme.

Of the tydes and courſes of the ſtreames.

Alongſt the coaſt of Flanders on the Land, a ſouth and north moone maketh full ſea.

In the fareway without the Flemish banckes in the ſea, a S. VV. moone maketh high water.

In the middeſt betwixt the heads, a S. W. moone.

At Dover, a ſouth and north moone.

In the Downes, a ſouth ſouthweſt moone.

At the N. Forland, a ſouth and north moone.

Alongſt the Flemish banckes, the fore-flood falleth over the banks towards the land, about the third part of the tyde, afterwards alongſt the Land, but the after-flood falleth to the northwards alongſt the ſea in the right fareway.

VVhen the flood beginneth to go there thwart off at ſea, then it is already half flood on the land, and the water flowen halfe wayes, ſo that men may goe into all the Havens on the Flemish coaſt with 5 or 6 foot water.

In the middeſt through the Heades, the flood falleth northeaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

From Dover to the N. Forland, the tyde falleth through within the Goodding N. and S. over the Brakes and Quernes.

Before Callice and Blackneſſe, the flood falleth firſt one quarter to the land, afterwards northnortheaſt.

Betwixt Blackneſſe and Bulleyn, the flood falleth north and by eaſt by the land, but a ſeaboard in the offing northnortheaſt. A S. S. E. moone maketh there the higheſt water.

Betwixt Bulleyn, Diep, and before the Somme, the flood falleth firſt one quarter to the land; afterwards north eaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

Of the Depths,

In the right fare-way betwixt the Marſdeep and the Heads it is 23 and 24 fathom deepe. A little without the Flemish bankes 18, 19, and 20 fathom, but neere Goodding, or about the north Forland, it is 26, 28, and alſo 30 fathom deep, the neerer Goodding the deeper water.

Being thwart of Goodding in 28 or 29 fathom, you ſhall not be 2 ſhots of a caſt-peece from it.

For to ſayl out of the Marſdeep towards the Head, go not on otherwiſe then ſouthweſt, and ſouthw. and by ſouth, (but you muſt be very carefull to take heed off the tydes) when you ſhall reckon to have ſayled 40 or 46 leagues, then edge over to the Flemish banckes, untill you come in 20 or 18 fathom, when that you are ſure of theſe grounds, then goe on ſouthweſt, and at length ſouthweſt, and by weſt, and you ſhal com in the midſt betwixt the heads of Callice and Dover.

Flanders you may ſee from the Poope in 16 fathom, and then you are within the point of the Flemish banckes.

Callice cliffe and the ſouth Forland, or the poynt of Dover, you may ſee when you are before them in 14 fathom.

To the ſouthwards of the Oldman, or Tour d'Ordre, lyeth the high land of Eaſtaples, which is very good to bee known, becauſe thereabouts is no land ſo high. When that is northnortheaſt from you; and you be thwart of the Somme, it is there deepe 8 and 9 fathom.

Upon the land off Somme towards Diep, ſtand many sharp towers, and ſome milles and trees, and hath all alongſt the coaſt a ſandy ſtrand.

Courſes and Diſtances.

From Blanckenbrough to Oſtend ſouthweſt and by weſt	2 leagues.
From Oſtend to Newport weſtſouthweſt	3 leagues.
From Newport to Dunkerck weſtſouthweſt.	5 leagues.
From Dunckerck to Graveling weſtſouthweſt.	5 leagues.
From Graveling to Callice weſtſouthweſt	4 leagues.
From Callice to Callice-cliffe ſouthweſt and by weſt	1 league.
From the Heades of Callice and Dover to the Riffe of Iutland northnortheaſt	110 leagues.
From Callice-Cliffe to the Naze in Norway, northeaſt and by N.	153 leagues.
From Callice-cliffe to Blackneſſe ſouthweſt	one great league.
From Blackneſſe to the Oldman, ſouth	2 leagues.
From Blackneſſe to Somme ſouth	9 leagues.
From the Somme to Treſport weſtſouthweſt	7 leagues.

Heights.

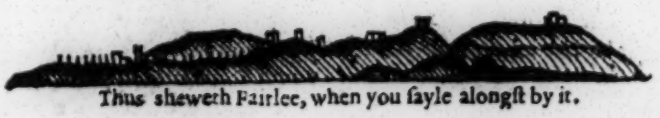
The Heads and Dover lye in	51 degr. 12 min.
The Somme lyeth in	52 degr. 18 min.

How theſe Lands doe ſhew themſelves at Sea.





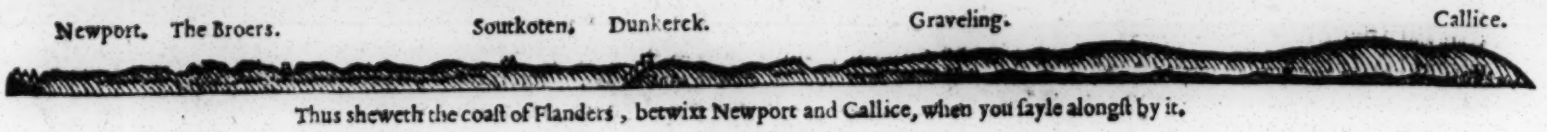
When you run from the Downes towards the north Forland, then the land sheweth it ſelfe thus.



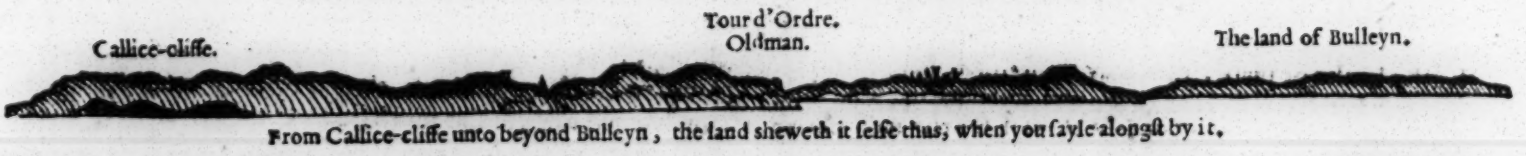
Thus sheweth Fairlee, when you ſayle alongſt by it.



Thus sheweth Dover when you ſayle to the weſtwards of the Vaen, or Vrowſand, through the Heads.



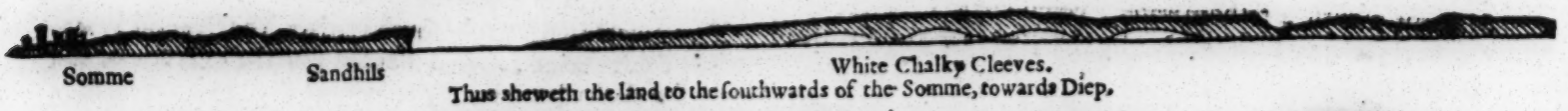
Thus sheweth the coaſt of Flanders, betwixt Newport and Callice, when you ſayle alongſt by it.



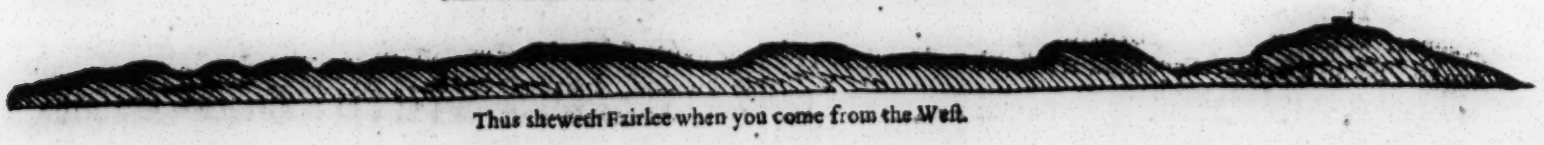
From Callice-cliffe unto beyond Bulleyn, the land sheweth it ſelfe thus, when you ſayle alongſt by it.



This ur dermoſt is Sandhils.
Thus sheweth the land betwixt Eaſtaples and the Somme, when the high land is northnortheaſt from you.



Thus sheweth the land to the ſouthwards of the Somme, towards Diep.



Thus sheweth Fairlee when you come from the Weſt.

The First part of the Fierie Columne.

THE SECOND BOOKE,

Of the

WESTERN NAVIGATION

Containg

The deſcription of the Zea-Coaſts of the France from Treſport to Roſcou, and the coaſt of England, from Fierley weſtward, to Englands end, the Channell of Briſtow, and with all the Sea-coaſts off Ireland.

The firſt Demonſtration,

Wherein are ſet forth the Coaſt off France, from Treſport to Roſcou.

FRom the Oldman to Diep, the courſe is ſouthſouthweſt ſixteene leagues, but from the Sommer to Diep ſouthweſt and by weſt eight or nine leagues. About halfe wayes betweene the Some and Diep, lyeth the River of Heu, within it on the north ſide lyeth Treſport, being alſo a tyde-haven, where men muſt goe in at high water, and at low water lye dry.

Treſport.

Diep.

At the eaſt ſide of the Haven of Diep, lyeth a rane off rocks, and from it lyeth a little riffe of chindle towards the north, or the weſt; to the ſouthwards of this riffe goeth in the channell, about ſoutheaſt in, it is very narrow, and a ſhort inlet, therein lye three buyes in the middeſt of the deepe, not above a ſtones caſt one from the other, men may run in on both ſides of them; comming to the end of the buyes, they muſt keepe the middle of the channell, and run in betweene the heads, untill they come within the towne, and there make faſt with a cable on the ſhoare. Men may not ſayle in there before flood, but not at halfe ebbe; at low water it falleth altogether dry, but within at the Towne men may ride a float, at high water there commeth three fathom, or at the higheſt not more then 3 fathom and a halfe water, there come out allwayes Pilots to bring ſhips in.

S. Valery, in Caux.

From Diep to Saint Valery in Caux, it is weſt ſouthweſt foure leagues, that is alſo a tyde haven, where you muſt goe in with high water, it is a narrow channell, where you goe in betweene to the Heads, there is neither ſand nor banck before it that can hurt you: being come in, you may let your anckor fall, and make you faſt with a cable on the ſhore. Hee that hath neither cable nor anckor, may (being come there within) ſayle his ſhip on againſt the ſhoare in the chindle, and ſo ſave his ſhip and goods without dammage.

Fecam.

From S. Valery to Fecam it is weſtſolithweſt foure leagues, is a deepe tyde-haven, there ſtayeth at low water little leſſe then 2 fathom water. At the eaſt ſide of the havens-mouth lyeth a banke or plate, men may with ſmall ſhippes ſayle in through betwixt it and the land, and ſo runne in, ſounding, borrowing it eight or nine foot alongſt by the eaſt ſhoare; which is flat. For to ſayle into the weſtwards off the plate, you muſt keepe the Tower of Fecam, without the land, or without the Weſt poynt of the Haven, and then it ſhall bee ſouthſoutheaſt from you, run then upon that mark into the Haven, and then the foreſayd ſand ſhall remaine on the larboard ſide off you, and at halfe flood you ſhall have in the Havens-mouth 2 fathom water, being come in before the towne, you may anckor there by the Weſter ſhoare in three fathom.

Struyſaert.

From Fecam to Struyſaert it is weſtſouthweſt three little leagues. Without the poynt of Struyſaert lye two high ſharp rocks. From thence to Seynhead it is ſouth and ſouth and by weſt, 2 leagues and a halfe.

About northweſt from Seynhead lyeth a bancke; upon which at low water remaineth no more then two fathom and a halfe water: when the towne of New-haven commeth without Seynhead, then are you thwart of the banck: For avoid it, run in cloſe aboard the Seynhead, alongſt untill you come within the firſt mill, there let fall your anckor in 6 fathom, and ſtay for a Pilot to bring you into the haven.

For to fayl into the River of Roan.

For to ſayle into the River off Roan, comming from the north or the eaſt, you muſt runne cloſe aboard the land to the northwards of Seynhead, and alongſt by it, ſo long untill the ſouth ſide of the river come unto the point of Seynhead, then runne in with it, untill the land to the weſtwards of Newhaven come without Newhaven, ſayle then unto the Haven of Newhaven. Or elſe, if you will goe without about the banke or the Rettires, then edge over to the weſtwards ſo far from the land (untill the river come open, ſayle then towards the point of Tochet, and run in upon your lead by it, there is at high water three fathom; and at low water no more then one fathom. The Rettires is a ſtony bancke, lying in the middeſt of the River of Seine, lying over towards the poynt of Honfleur, at low water it falleth at ſome places drie, at halfe flood it is to the ſouthwards three fathom, but to the northwards 2 fathom deep. When the land of Caen is without the poynt of Seynhead, and you ſayle then with it, ſouth on, then you runne to the weſt wards off it, or alongſt without it. Or elſe, if you keepe Struyſaert a handſpikes length without the poynt of Seynhead, then you runne alſo without it. When the eaſter gate of New-haven commeth over the eaſter head, and the eaſter mill, and ſayle then ſo on, keeping them ſo, then you runne in right to the northwards of the Rettires, and alſo you can take no hurt of the banck that lyeth towards Seynhead. At Hebell or New-Haven men muſt goe in at a high water, and within lye everie tyde drie.

The river of Seine muſt be ſayled into upon the tide, when the moſt, or the ſtrongeſt off the flood is ſpent, then you may ſayle alongſt by the land upon your lead, untill you may ſe in open into the river of New-haven, when then the ſouther Caſtle commeth over the eaſter-head, and the mill; run then right in upon it, but it is beſt to anckor halfe wayes betwixt the Caſtle and Seynhead, and there to ſtay for a Pilot: If there come none off, then ſayle from thence right with the Caſtle that ſtandeth upon the head, there it is deepeſt water.

To ſayle from New-haven upwards, towards Roan, is not well to be done without a Pilot, you muſt goe with the tyde through the firſt travaille or banckes, which lie from New-Haven to Honfleur ſoutheaſt, alongſt by the ſouther-land, and from thence alongſt the north ſide off the River to Quillebeuf, being come there, you are through the firſt travaillie. You muſt alſo bee well adviſed, and take good heed for the ſtrong ſpring by the Normans, called La Barre, which everie tyde commeth on ſo ſtrong with the flood, that anckors and cable have enough to doe to hold a ſhip: For that and other dangers more, it is not good nor convenient to ſayle up the river without a Pilot.

Tochet.

Two great leagues to the ſouthwards off the river off Roan, lyeth a Tyde-haven, called Tochet, on the weſt ſide of the entry ſtandeth a beacon, by it you muſt go in, or you may ſound it in by the Eaſter-ſhoare. Southweſt, or Southweſt and by ſouth from the poynt of Seynhead, about ſix or ſeven leagues off, lye many bankes, a good wayes in ſea, you may ſayle on both ſides off them (as well to the eaſtwards as to the weſtwards) into the Foſſe off Caen, which lyeth in moſt ſouth, and lyeth in a Baye. At the weſt ſide lyeth a chindle, where men may ride within it, it is wyde and broade, and ſandy ſtrand, the eaſt land is ſand-hills, and farre flat in ſixe and ſeven fathom, there men may goe in, ſounding with the ſounding pole.

Foſſe of Ceen.

From Seynhead to Cape de Barfleur, or Cape de Schierborough, the courſe is weſt nineteene leagues. About foure leagues to the eaſtwards off it lye the Ilands of S. Marques, men

e. Schierborough.

may

~~The First Booke,~~

OF THE NEW,

FYRIE COLOMNE,

Of the WESTERN NAVIGATION.

THE FIRST PART

wherein the Descriptiön,

Of the

GREAT CHANNEL,

Which is seth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very serving-able for all Mariners and Pilots.



Printed at Amsterdam,

By Iacob Columne, on the Water, in the Firie Columne,
Anno M. DC. XLIX.

PASCAERTE van HET CANÆL TUSSCHEN VRANCKRYCK, EN ENGELANT Van de west-zijde van Schotlant, als Mede van Ierlandt.

Nieulix Wtgegeven Door

Iacob Colom.

ENGELANDT

Sorlinges

Wolf

Leevenstein

Hinsant

Chemmers

Bolduc

Landreath

Bre

VRA

Morlaix

Morlaix

Driakelpotten

Eylanden

NC

ne

S. Malo

Cancalle

Pont Orson

Kiscassen

Orvaij

Dorchester

Poke

Hurstcast

Southampton

Brainber

Nieuwerhaven

Sussex

London

Walles

Bristou

Chester

Dorsmuyen

Deoremanshooft

Scoppertpoint

Tallandpoint

Westkapelle

Dit

Plaimuyen

Dortmuyen

Torbay

Plymouth

Exmouth

Portland

Weymouth

Poorstrandt

Bruyert

Portsmouth

Kingsride

Nimport

Tusker

Swijdegronden

Middelgrond

I. Salten

I. Lundey

I. Caldey

I. Ramsey

I. Cabine

Porlock bay

Porlock

Mynhead

Dunster

Combemartin

Barnstable

Bedderd

Stratton

Northamptonpoint

Isle combe

Hauboos

Westkapelle

Pleimuyen

Dit

Brouckhaut

Zeeuwsbroot

Zeeuwsche Gronsschoot

Ramsgat

Margate

Dover

Calais

Boulogne

Etaples

Crotoy

Abbeville

Tresport

Dieppe

Roan

Hableadegrace

Honfleur

Tocque

Barfleur

Cde Barfleur

Quarentine

Cherbourgh

Foss la mahon

Foss

Cancalle

Pont Orson

Arck

Sarck

Bruc

Cde Frehel

Portrieux

Paimbeuf

Pornic

Pilot

Lambarlesse

Vlieberge

Groene Gadt

Pourlande

Lanchoesse

St Jans de Deij

Morlaix

Morlaix

Landreath

Bolduc

Chemmers

Hinsant

Cancalle

Mont Orgueil

Castle

Castle

Castle

52 53 54 55

I. Blasques

Sond van Blasques

Brandonhyl

Lupi hoest

Slyneheed

Blacrock

Slack van Bredhaven

Kinlael

Korck

Galloway

Lymricke

Iochul al Iougal

Dungarvan

Endrigo

Sligo

I. Roglencherne

I. Aran

Waestoort

Dungal

Westfoort

Dubling

Klogher

Hederah

Deodath

Carlingfoort

Longford

Bery

Kildare

Ardglas

Zudrock

Nordrock

Copelands Iler

De Maydes

Glasque

Cresfoerd

Dumfrosie

Lancaster

Carlisle

Ebenthien

Kirkebrit

Air

Tarbat

Combal

Kintaile

Fewris

Lochbrune

Skyrasin

I. Vlanda

C. Wrath

S. Petrus

S. Maria

Terre

Rum

Callin

Ile

Sym

I. Arren

I. Man

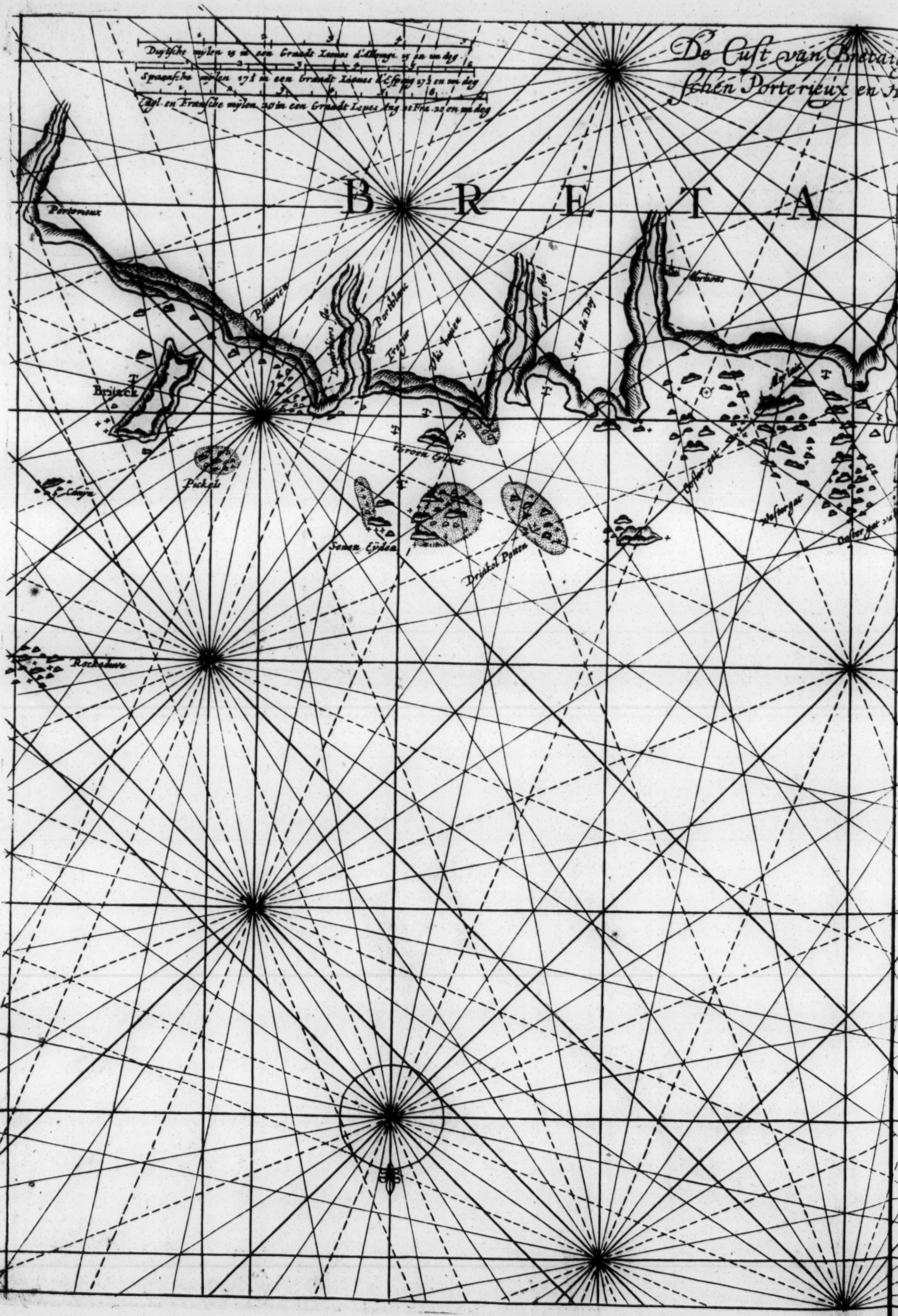
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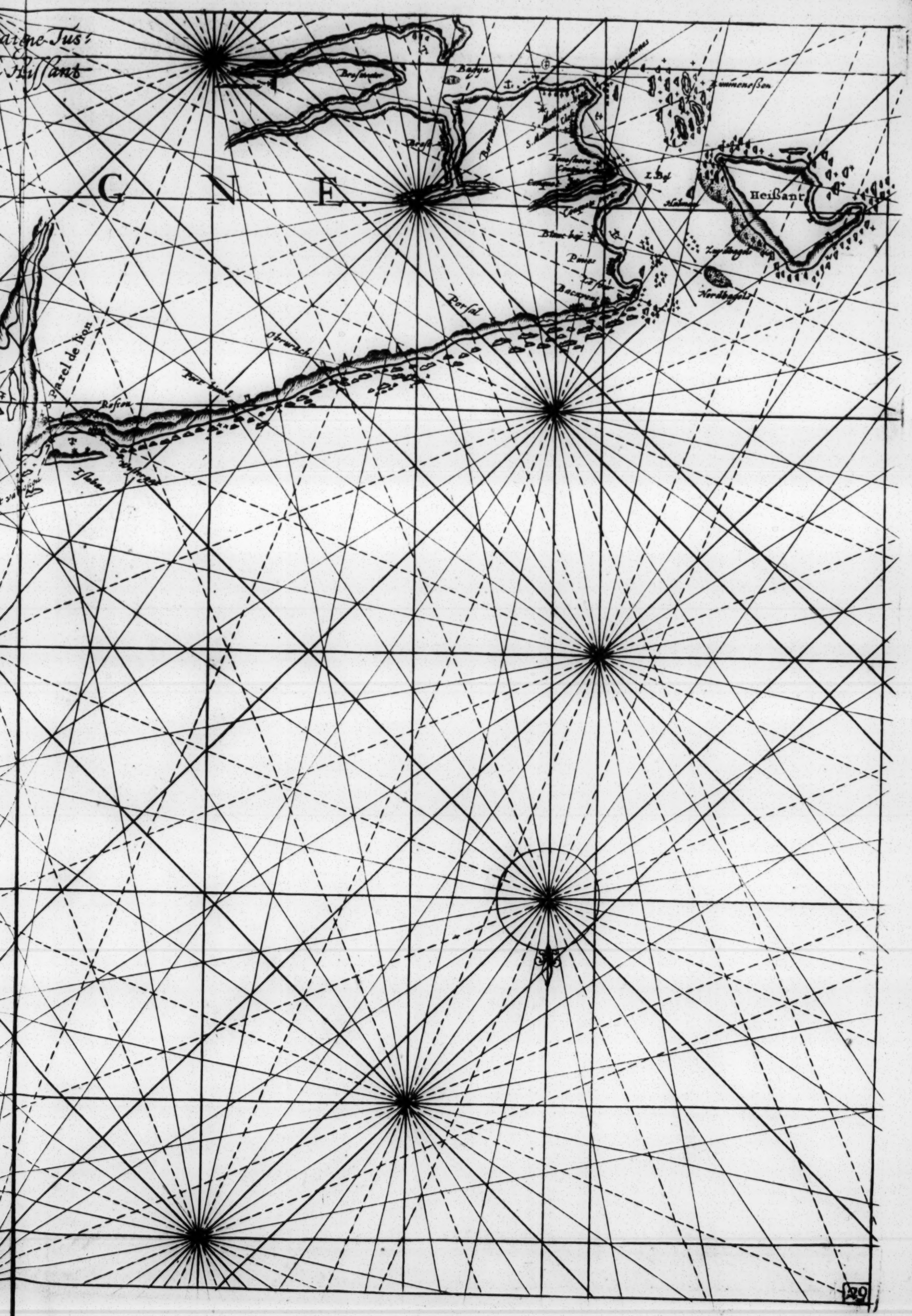
SCOTLAND

Duytsche mylen 15 in een graedt — Lieues d'Allemaigne 15 en un degre.

Spaensche myl en 17 ½ in een graedt. — Lieues d'Espaigne 17 ½ en un degre.

Engelsche en Fran. myl en 20 in een graedt — Lieues Angl et Franc. 20 en un degre.


Duytsche mylen 15 in een Graedt Iacques d'Allemagne 15 en ma deg
Spaensche mylen 17½ in een Graedt Iacques d'Espag 17½ en ma deg
Engel en Fransche mylen 20 in een Graedt Iacques Ang et Fra 20 en ma deg
B R E T A
Portorieux
Brijack
Pickels
Seven Eylden
Rochelaer
Dridtol Ponte


G N E.
Heißant
Persal
Parel de hon
Obrarach
Rosim
Ysabeau

Duytsche mylen 15 in een Graad Lieues d'Allema: 15 en un deg.

Spaensche mylen 17½ in een Graadt Lieues d'Espaigne 17½ en un deg.

Engel. en Fransoy. mylen 20 in graedt Lieues Angl. et Fran. 20 en un deg.

Caen

Fosse stu

Baiocas

Lisieux

Honfleur

Lisieux

Gerfleur

De Seine

Balliere

Habbé neuf
Habbe de grace

Fecam

Struysheri

S. Valery

Abbeville

Diepe

Tregost

Crul

De Custe van Normandie, van Diepe tot Porterieus.

Pont Orson
Cancale
Mont de S. Michiel
Lafagie
Granville
De Sausse
Monks
Mortagium
Buysun
Gaure
Ebarin
Larzee
Rockedune
Marcol
La Longe
I. de S. Marcou
C. de Berthe
Sarck
Arck
Arem
Garnzey
Orney
Orn. IV
Blanckart ofte Orney
C. de la Hague
Bas
Barroches
Casquettes ofte Xystasen
Poortlant
XXVIII

BRITISH
11 JU62
MUSEUM

may ſayle round about them, but it is not there very cleane.

S. Marcus la Honge

A league to the weſtwards of the Iland of S. Marcus lyeth a Honge a flat Tower, to the weſtwards of it lyeth the point of Barfleur, betwixt both is a great baye, where men may lye in 6 or 7 fathom land-lockt for a northnorthweſt winde. A northeaſt winde bloweth there open in.

Sunckenrock.

From the north-poynt or C. de Barfleur (which lyeth northnorthweſt from you, when you lye in the road) lieth of a banck or little riffe, yet a ſhippe may go over it. Northeaſt a league and a half of from the foreſayd poynt lyeth a rock under water, where ſhippes may not goe over.

C. de wyck

From C. de Barfleur to Schierborough it is weſt and weſtnorthweſt foure leagues, that is a little Tyde-haven. To the weſtwards off the poynt off Barfleur lye ſome foule grounds, if you keepe the high land of Schierbrough without the Cape de Wyck, you ſhall not come to neare them.

Before Cape de Wyck is a good roade in ſix fathom, a little to the eaſtwards off the two high rockes in a ſandbay.

Before Schierborough lye ſome rockes, or little Ilands, which are cleane round about, to the weſtwards off it lyeth a Tyde-haven, called the Foſſe off Moberille, before it on both ſides lye 4 or 5 high rocks, at high water men runne through betwixt them, and ſo into the Haven. A great league and a halfe to the weſtwards off it, lyeth Cape de Hague.

Cape de Hage.

Two leagues weſt and by north from Cape de Hague, lyeth the Iland Aldernay or Ornay, betwixt them goeth the Race of blancker through. Aldernay or Ornay is about three leagues long, and lyeth eaſt and weſt. The eaſt end is cleane, men may ſayle reaſonable cloſe alongſt by it, but the weſt end is very foule: There lye ſome little Ilands cloſe by the weſt end, being paſſed them, men may ſayle towards Jarſey without any feare.

Ornay. The Race of blanckert.

To the ſouthwards of the foreſaid little Ilands at the weſt end lyeth of a ledge of rockes, within it, on the ſouth ſide it is cleane, except at the ſouth poynt, that is alſo foule. Hee that will anckor on the ſouth ſide of Ornay, muſt be mindfull thereof, and anckor a little to the eaſtwards of the Tyde-haven.

From the weſt end off Ornay lyeth a great multitude of rockes weſt and by north, and weſtnorthweſt of three leagues into the ſea.

Upon the outtermoſt and weſtermoſt end, lyeth a great high rocks with many other ſmaller rocks about it. Halfe wayes betwixt this great rocke and Ornay lyeth another great rock, but not ſo high as the foreſayd weſtermoſt, from it lye of a multitude of rocks towards the outermoſt, which fall dry at low water, but at high water many lye under water. Theſe two great rockes are called by the French Les Caſquettes, and by the Dutch the Kiſkaſſen, and by the Engliſh the Caſkets. Cloſe by the weſt end of Ornay, towards the Caſkets, lye other two great ranes of rockes, called the Barroches.

Caskets.

Barroches.

From the eaſt point of Ornay to the eaſt end of Garneſey (about to the ſouthwards of Ornay) the courſe is weſtſouthweſt, ſeven leagues; but from the Caſkets to the weſt end of Garnſey ſouthweſt and by ſouth, 7 leagues.

Roan under Garnſey.

If you will anckor under Garnſey (comming from the Caſkets) then runne on to the northeaſt poynt of Garnſey, and ſo for to the eaſtwards of it, untill you get ſight of the caſtle that ſtandeth upon the rock on the eaſt ſide of Garnſey. Or if you come about to the weſtwards of the Caskets, then goe on ſoutheaſt, or ſomewhat more ſoutherly, untill the northeaſt poynt of Garnſey be ſouth and by weſt from you, ſayle then towards it, you ſhall come in ſight of that foreſayd caſtle upon the rocke. Bring that over the ſouth point of Garnſey, and ſayle in upon that marke, betwixt the Iland Arem, or Harm, and Garnſey, untill you come by the foreſayd Caſtle, betwixt theſe Ilands it is on both ſides full of rockes, whereof you muſt take good head, eſpecially on the larboard ſide towards Arem, when you are come by the caſtle, you may anckor within or without it, where you pleaſe, without the Caſtle in 12 or 13 fathom, or within the Caſtle) that is betwixt the Caſtle and Garnſey) in ſix or ſeven fathom at low water, it doth flow there ſix or ſeven fathom up and downe, which men muſt reckon upon.

Under the ſouth ſide of Garnſey men may ryde for northweſt, north, and northeaſt windes. If you come from the weſt, or from the Caskets, you muſt runne cloſe about by the ſouthweſt poynt, called C. de Gruſe; and alongſt by the ſouth ſide of the Iland, well halfe wayes the Iland, & anckor there where you think good, in eighteene or nineteen fathom. If the wind ſhift to the ſouthweſt, or to the weſtſouthweſt, then you may runne about by the ſouth poynt unto the foreſayd Caſtle, and anckor there either without or within it, as here before is ſayd. From the aforeſayd ſouth poynt, lyeth off a little ledge off rocks, whereof ſome rocks lye above, and ſome under water, that you muſt avoyd when you ſayle about by it.

Rockeduves.

South and by weſt, and ſouthſouthweſt about eight leagues. From Garnſey lyeth a great ledge of rockes, more then a league great, called Rockeduves.

Saeck.

About 2 leagues eaſt from Garnſey lyeth the Iland Sarck, there men may anckor round about it in five and twenty, ſix and twenty, and ſeven and twenty fathom. From the north end lye off ſome Rocks, whereof ſome lye above, and ſome under water. At the ſouth end of lye alſo ſome rockes, but all above water.

Arck and Arem.

Betwixt Garnſey and Sarck lye two other little Ilands, Arck and Arem, or Harm, there men may ſayle through betwixt them.

The Iland Jarſey lyeth from Garnſey ſoutheaſt diſtant 7 leagues, round about this Iland are good roades at divers places. All alongſt the north ſide men may anckor in 10 and 11 fathom. At the ſame north ſide, ſomewhat within the weſt poynt, lye ſome great rockes, a good wayes of from the ſhoare, called the Pater noſters, or Pierreleg. At the ſouthweſt poynt lye many rockes which lye of a great waves into the ſea, to the northwards of them, to wit, betwixt them and the weſtermoſt poynt, at the weſt ſide of Jarſey men may anckor at divers places in ten, eleven and twelve fathom. At the ſouth ſide of Jarſey is alſo a good road for a northweſt and weſt northweſt windes. At the eaſt ſide lyeth S. Catherines baye, there alſo a very good roade for weſterly windes.

Pater noſters.

S. Catherines b.

The weſt end of Jarſey and S. Malloes, or the Iland Siſember before S. Malloes lye ſouthſoutheaſt, and northnorthweſt, eight or nine leagues a ſunder. About halfe wayes betwixt both right in the fareway, lye a great number off high rockes together, which containe in circuit in ſayling about, ſeven or eight leagues, called the Mankiers, they lye farre towards Jarſey, ſome above and many under water, ſo that is not without great danger to runne through betwixt Jarſey and the Mankiers.

Mankiers Rockes.

When men will ſayle through the Race of blanckert, bound for S. Malloes, they run commonly through betwixt Sarck and Jarſey, men may alſo ſayle to the eaſtwards of all the Ilands and ſhowlds alongſt the coaſt of Normandy, towards S. Malloes in manner as followeth.

Le Beuf.

When men come a little paſt the C. Voorha, they ſhall meet (thwart of the Iland Jarſey) with three or foure high rockes, called Le Beuf, men may runne to the weſtwards of them, and ſo through betwixt them and the Iland Jarſey, or els to the eaſtwards of them alongſt by the main land, upon as they will; towards the riffe of Mortefaim, that lyeth upon the coaſt of Normandy ſouthſoutheaſt, 8 leagues from Cape de Voorha.

Beufkin.

Over againſt, or thwart of the Riffe of Mortefaim, lyeth a rane off rockes lying eaſt and weſt more then a league in length, called Beufkin, at the eaſt end many of them lye above, and at the weſt end moſt of them lye under water. Men muſt ſayle through betwixt them and the riff of Mortefaim that are bound for Granville.

Eckerou.

Betwixt the foreſayd rockes Beuf and Beufkin, lyeth another great rane of rockes, called Eckerou, which lye off from the ſoutheaſt poynt of Jarſey towards Granville; you muſt leave all theſe rockes on the ſtarboard ſide, and run alongſt to the eaſtwards of them.

From the riffe of Mortefaim to Granville, the courſe is ſouthſoutheaſt, and from Beufkin ſoutheaſt 4 leagues.

Granville.

Cape de Voorha and Granville are two points that lye without the other land. About the ſouth poynt of Granville lye two or three little rockes; along by them men muſt run in within a Pier or head, where the ſhips lye dry at low water. Betwixt cape de Hague, and Granville, men may ſee upon the land many little houſes, mills, and trees, as they ſayle alongſt by it. A little to the ſouthwards off the riffe Mortefaim ſtandes a Church with two ſteeples, called Quotanſe. All alongſt this whole coaſt is every where good anckering in ſixe or ſeven fathom, eſpecially a little to the ſouthwards of Cape de Hague.

La Shauſee

About two leagues weſt from the poynt off Granville lyeth another great rane of rockes two great leagues long, lying eaſt and weſt, called La Shauſee, betwixt them and the poynt of Granville men muſt ſayle through that are bound for Concalle or S. Malloes.

Mount de S. Michiel.

About five leagues to the ſouthwards of Granville, in a great baye, lyeth an Iland before the river off Avrantie, about a league without the land, called Mount de S. Michiel, upon it lyeth a Caſtle, or little towne, called S. Michiel, with a high Tower

Tower which men may ſee at ſea. This Bay is to the ſouthwards of Granville, within the rocks of Concalle, very flat and riſing ground, from thirteene, tenne, eight, ſixe and foure fathom to one fathom, ſo that at low water the Bay falleth ſo farre drye, that from the ſtrand men ſee no ſea nor water.

From Granville to the poynt off Concalle, the courſe is ſouthweſt 5 leagues, from that eaſtwards lye three rockes, under which men may anckor in ten fathom. For to ſayle to the towne men muſt runne in betwixt the poynt and the foreſayd rockes. It is betwixt them both eight and nine fathom deepe. Before the towne it is ſhowlder water. To the northwards of the Towne lye other two rockes, there men may alſo anckor under in 5 and 6 fathom water.

From the outermoſt rockes by the point of Concalle untill you come before S. Malloes, the courſe is weſt, and weſt and by ſouth 5 leagues.

S. Malloes Siſember.

Before the haven of S. Malloes, lyeth an Iland, called Siſember, upon the weſt end thereof ſtandeth a mill, and upon the eaſt end a Church with ſome little houſes being a Friery, comming out off the ſea, you can but even ſcarce ſee the Church, but being within the Iland, you may ſee it better, becauſe it ſtandeth on the ſouth-ſide of the Iland. A great ſhot off a caſt peece to the eaſtwards off Siſember, lyeth a great high rock, called the Meuwſtone: betwixt them and Siſember it is all full off rockes and ſtones, which at high water lye moſt under water: there is a little channell betwixt them both, which the French men uſe with theyr ſmall ſhipping, through betwixt the rockes, but is not to be uſed with great ſhipping, neither by them that are not very well acquainted with it.

Mewſtone.

Betwixt the Meuweſtone, and ſome other rockes to the eaſtwards off it, lyeth in a channell ſouth and ſouth and by eaſt in, called la Congie. For to ſayle in there you muſt runne in cloſe aboard to the eaſtwards of the Meuweſtone, ſoutheaſt and by eaſt right in with the towne, untill you bee gotten in two third parts of the diſtance (betweene the Meuweſtone and the Towne) from the Meuweſtone, and are one third part of the diſtance from the Towne, that is when the Meuweſtone is twice ſo farre from you as the Town, then you ſhal ſee by the northweſt poynt of the Town two great rockes, about a ſhot of a caſt peece from the foreſayd poynt; upon each rock ſtandeth a little houſe, the outermoſt is the ſmalleſt, and is called the little Bee, the neereſt to the Towne is the greateſt, and is called the great Bee, ſayle then towards them, and run in about them within a cables length of them, but keepe that courſe ſo long, untill that the little Tower (that ſtandeth a little to the ſouthwards of the towne upon the poynt) come over the tower of Bore a little to the eaſtwards of Saledoor, keepe them one over the other, and ſayle ſo in, unto the ſouth end of the town, where the mils doe ſtand, then you ſhall ſe there upon the rocks two Beakons, run betwixt them through at high water, untill you come within the towne, at the eaſt ſide, the ſhippes lye morred with foure cables dry at low water, two faſt on the towne, and two upon the ſand. Betwixt theſe two foreſaid beacons, to the ſouthwards of the town, and thereabouts, is the ground ſharpe, rockie and ſtonie, therefore men muſt take heed not to ſtay there at low water, or to ground there, but within on the eaſt ſide of the town it is cleane ſandie ground, there may the ſhippes lye a ground without danger.

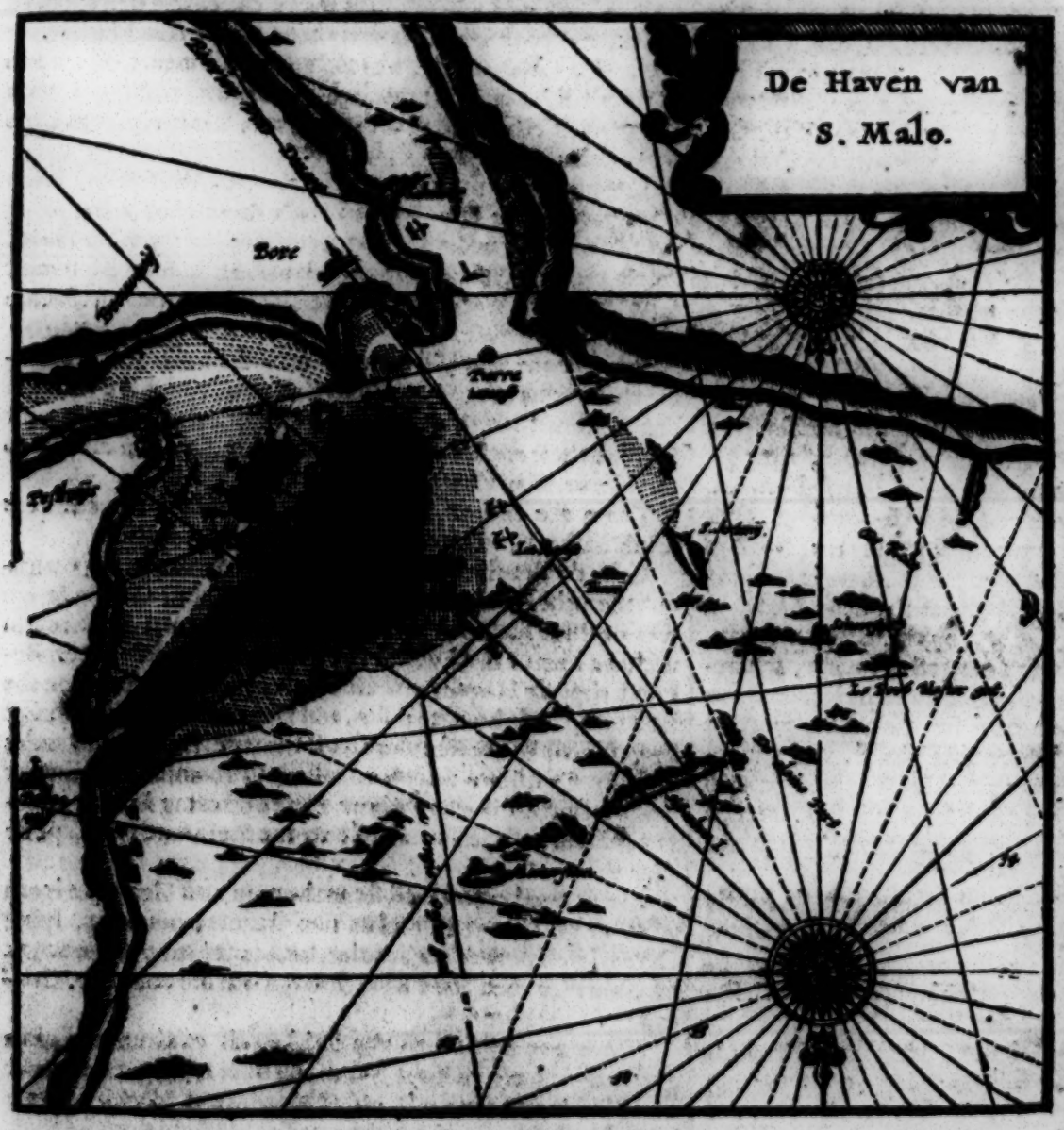
La Bongie

Little and great Bee

A little within, or to the ſouthwards of the foreſayd rock the little Bee, men may anckor in five or ſixe fathom water at low water, ſo that the tower of Bore cometh a little to the eaſtwards of the little Tower upon the poynt to the ſouthwards of the Town, that road is called by the French La Ranſe, there men commonly firſt anckor, and ſtay for high water, for to goe in about to the ſouthwards off the Towne. It floweth here at S. Malloes, and thereabouts, ſeven fathom up and downe with an ordinary tyde.

The Road la Ranſe.

From the weſt end of Siſember, lye off alſo a great many rocks alongſt to the weſtwards, more then a great ſhot off a caſt peece, at the end of them goeth in the Weſter-channell of S. Malloes, eaſt and by north in. For to ſayle in there, you muſt look out for a ſharp little Tower, that lyeth ſomewhat to the northwards or to the eaſtwards of S. Malloes, within the land called Pellemy; when you have brought that eaſt and by north from you, then you ſhall ſee upon the ſhore right againſt it, a great black rocke, which for Blackeneſſe ſheweth it ſelfe without all the other rockes thereabouts, and thereby is very good to bee knowne: Bring that rocke and the foreſayd little Tower one to the other and ſayle ſo right in untill you come thwart of the Iland Siſember, or els that the little Tower (upon the poynt to the ſouthwards of the Towne) come to the Tower of Bore, to the eaſtwards of Saledoor, ſayle then towards the roade of La-Ranſe to the ſouthwards of the little Bee; or els if it be high water, you may run in upon the markes, and then in about to the ſouthwards of the Towne, as here before is ſayd.



When you ſayle into this weſter channel, you ſhal leave on the ſtarboard ſide a high rocke (called the Schoorſteen) with more other rockes to the weſtwards of it, which at high water are moſt of them over flowne. On the north ſide, that is on the ſtarboard ſide, lye alſo many rockes, whereof many of them overflowane at high water, and alſo many remaine above water.

More, a Souther-channel.

Yet a ſouther channel lyeth in by the land to the ſouthwards off the rock off S. Antony, upon marks that men doe ſe a ſtearne the ſhip, but it is not uſed but with ſmall ſhips.

ſtonebank

About halfe wayes betwixt the weſter channell of S. Malloes, and C. de Farela, lyeth a ſtony banck under water. A little to the weſtwards of C. de Farela, lyeth a great rock. When you will ſayle from C. de Farela towards S. Malloes, & that you keepe the foreſayd rock right upon the poynt of Farela, you ſhall ſo (without faile) ſayle upon the Stonebanck: but if you keep the rock hidden under or behind the poynt, then you ſhall ſayle alongſt to the

the ſouthwards off it. Or elſe if you keepe it without the poynt (ſo that you may ſe through betwixt it and the point) then you ſhall ſayle alongſt to the northwards of it. The foreſayd rock is a good marck for to know Cape de Farela by.

Foure leagues weſt from S. Malloes lyeth a great Sandbay, where men may lye landlockt for all windes: Men doe anckor within a great rock, right againſt a mill and ſome trees.

C. Farela. About two leagues northweſt from that Sand-bay lyeth the Cape de Farela, which is alſo called Cape de Late, after the Caſtle de Late, that ſtandeth to the eaſtwardes off the poynt; there is a good Roade for weſt and ſouthweſt windes.

Oyſterbanck. Two great leagues northweſt from the entry of the Haven off S. Malloes, lyeth the Oyſterbanck, there under it men may anckor in 6 or 7 fathom.

I. Briack. To the weſtwardes of Cape de Farela unto the north-end of the Iland Briack, the courſe is weſt and by north nine or ten leagues. Two leagues from the land weſt from the Cape lyeth a great rane of rockes above water. Between the foreſayd Cape and the Iland Briack lye the Havens or Rivers of S. Brieux and S. Benit.

S. Brieux, & S. Benit The Iland Briack is two leagues long, and lyeth ſouth-ſouthweſt and northnortheaſt, when you come from the eaſt, you ſhall ſee two milles upon it, and betwixt them a high round hill, with a litle houſe upon it: you may ſayl round about this Iland, and may make roades on every ſide where you will, although round about it here and there lye ſome rocks, yet it is all over good anckor-ground. A good wayes off from the northeaſt point lyeth a rock, called Souffe, and at the north end lyeth a ledge of rockes under water, whereof you muſt take heed.

A great league weſtſouthweſt from Briack, three or foure leagues a ſeaboard the land, lye the out-rockes, called the Pickeles, men may ſayle round about them alſo, but to the eaſtwards of them towardes the main land, lye many ſuncken rockes.

Foure leagues to the weſtwards of Briack lyeth the Port Blanck upon a great river, called Lantrilliers, to the eaſtwards of this haven lye off many out-rockes.

Portblank Lantrilliers. 7 Iſles. To the weſtwards of Port Blanck, lye the Sept Iſles, or ſeven Ilands, lying from the Pickels diſtant five leagues eaſt and weſt. A league to the ſouthwardes off them lyeth the green land; there you may ride round about it. Betweene the ſeven Ilands you may not ſayle through, but to the ſouthwards off them, betwixt them and the Green Iland goeth a broade channell through. From the eaſtermoſt Iland lyeth off a fowle riffe to the ſouthwards, upon the outermoſt end off that riffe lyeth a rocke, as a good marke for to ſayle about the riffe. Northweſt from the weſt-end off the ſeven Ilands, lyeth alſo a ſuncken rock, which at low water may be ſeene. Men may alſo ſayle alongſt by the coaſt from Port Blanck, within to the ſouthwardes of the Green Iland, and come out againe into the ſea to the weſtwards: From thence northweſt off into the ſea, lye the Triacle Pots, theſe are great fearefull out-rockes, which lye ſpread wyde and broade weſt-ſouthweſt from the ſeven Ilands, and foure or five leagues a ſeaboard the land.

Greene-Iland.

Triacle. Pots.

Betwixt the Triacle Pots and the ſeven Ilands lyeth the River of Laminoe, to the weſtwardes of the Greene Iland: For to ſayl in there, men muſt take good heed of the northeaſt poynt, which is fowle.

R. Laminoe.

Thwart of the ſeven Ilands, upon the maine land, ſtandeth a Church with a high ſteeple, called Our Lady of the Clearneſſe, thereby men may know them.

Thwart of the Triacle Pots ſtandeth alſo a high Tower, thereby men may know when they are neere them, but it muſt be very cleare weather before men can well diſcerne it upon the land.

Hee that commeth by night or darke weather from the Fourne, or Uſhant, and is bound to Saint Malloes, let him not goe with a ſoutherly winde, to the eaſtwardes off eaſt-northeaſt, or northeaſt and by eaſt with a weſterly winde, ſo long untill hee hath the length off the Triacle Pots, that they bee on his broad ſide. The flood falleth ſoutheaſt within the Triacle Pots and the ſeven Ilands, and ſhould by night eaſily draw a ſhip towards them. By day, or when there is ſight, there is no ſuch danger.

Within the Triacle Pottes lyeth the tyde haven off Saint John de Doy, two leagues to the weſtwards of the Green Iland, and two leagues to the eaſtwards of Morlions, men may ſayle from thence through the rockes unto Morlions, and anckor in five and ſixe fathom at low water.

Morlions.

To the weſtwards of the Triacle Pottes lyeth a great rock, the eaſter entry of Morlions lyeth from it ſouthweſt and by ſouth diſtant two leagues, but the weſter entry lyeth from it weſtſouthweſt and weſt and by ſouth foure or five leagues, that goeth in by a great long ragged rock. This entry men may ſayle in ſouth, and ſouth and by weſt, unto the caſtle off Morlaix; being about the caſtle they may run through the rocks againe to the eaſtwards, and runne out againe at the eaſter entry northnortheaſt, and north and by eaſt into ſea, according as the tyde ſhall be, the flood commeth there out of the northweſt. Morlaix

If a man would goe from Morlaix to Morlions, hee may goe on eaſt through the rockes, and ſo ſayle to it: It is all broken land, and there remaineth at low water five fathom depth. S. Paul de Lion.

If you bee bound to S. Paul de Lion, you muſt run right with the great rock, with the two horns or Sadle, and ſo cloſe alongſt by it: being paſt it, edge to the land upon the ſtrand lyeth a village, called Plempoll, ſayle right with it, and alongſt by it, to the eaſtwards of it goeth in the river. Theſe are all tyde-havens, but betwixt the rockes of the Morlions, and the Ilands Bay, it is at lowe water deepe enough for to ſave a ſhip.

The land of S. Paul de Lion is double land, upon S. Pauls Church ſtand two ſharpe ſteeples. The Iland Iſle de Bas, lyeth thwart before it, upon it ſtandeth two ſtakes, to ſee to a farre off like milles. Upon the eaſt end of that Iland lieth a very high ragged rock, when you are to the eaſtwards of this rock, you ſhall ſe two ſharpe ſteeples a ſpace one from the other, theſe are the ſteeples of Plempoole: you may alſo then ſee the Caſtle of Morlaix, lyeth ſoutheaſt from you, upon a high rock.

Iſle de Bas The foreſayd outermoſt long ragged rocke of Morlaix, lyeth from the top of the Iland Iſle de Bas, eaſt, and eaſt and by ſouth three or foure leagues. Men may ſayle alongſt by the maine land within and through theſe rocks, untill they come to the ſeven Ilands, they are all great bayes, where at moſt places is good anckor ground.

Roſkow. Within the Iſle de Bas lyeth the town of Roskow, you may ſayle into the haven off Roskow at both ſides off the Iland.

For to ſayle into the eaſter channell, when you are paſſed by the high rocke with the ſadle, or two hornes, called Le Taureau, and come by the land, betwixt the eaſt poynt of the Iland, and the poynt of the maine land over againſt it, you muſt ſayle in keeping the middle of the channell. It is in this channell ſeven and eight fathom deepe. Being come within the poynt of the Iland, you muſt runne in about by it, weſt and by ſouth, and weſt on, untill you come about halfe wayes within the Iland, and anckor there in eight or nine fathom. And then Roskow ſhall lye ſouth and ſouth and by eaſt from you.

If you will ſayle into the weſter channell, you ſhall ſee to the weſtwards of it, cloſe by the maine land, two great long rockes. From the point of the maine land, a little to the eaſtwards of the eaſtermoſt long rocke, lyeth of a riffe from the land, which maketh the weſt ſide of the channell, you muſt runne in ſoutheaſt betwixt that riffe and the weſt poynt of the Iland, and when you come within the poynt of the Iland, you muſt edge up northeaſt unto the middeſt of the Iland, and anckor there as here before is ſayd.

From Iſle de Bas alongſt to the Fourne or Uſhant lyeth the coaſt weſtſouthweſt 16 leagues.

Road under the Neſſe. The poynt of Dongie Neſſe lyeth from Dover ſouthweſt and by weſt diſtant 9 leagues. At the eaſt ſide off the Neſſe in Romans Bay, thwart of the Romans-Tower, is a good roade for weſt and S.W. windes: For to anckor there, runne ſo farre in the bay, that the point of the Neſſe be ſouth and ſouth, and by weſt from you, anckor there in about 7 or 8 fathom; you may alſo anckor on the weſt ſide of the Neſſe, for a northeaſt winde, ſo that the poynt lye eaſt and by north from you.

Camber of Rye. For to ſayle into the Camber of Rye, comming from the weſt, you muſt keep Beachy without the poynt of Fairlee, and run ſo towards the Neſſe, and being come in faire by it, run in without two cables length alongſt by it, unto the end of the Neſſe, then edge up to the weſtwards, and leave the beacons upon the ſtarboard ſide, untill you come before the caſtle Camier, that ſtandeth upon the ſouther chindle, there you may anckor in 4 & 5 fathom: From thence along even unto the Town of Rye, it is all ſet with beacons, which ſtand alongſt by the eaſt ſide of the deep, unto the Daries, which at low water fall dry. In ſayling unto Rye, you muſt leave all the beacons unto the ſtarboard ſide, and run indifferent cloſe alongſt by them.

Of the Tydes and Courſes of the ſtreames.

Betwixt Diep and Struyſaert without the land in the fareway, the flood falleth northeaſt and by eaſt, and the ebb ſouthweſt and by weſt.

At New-haven, and in the River off Roan a ſoutheaſt Moone maketh a high water.

From Struyſaert to Caen in the Foſſe, the flood falleth ſouthſouthweſt, and the ebb northnortheaſt.

Before the have of Caen a ſouthſoutheaſt maketh high water, within the haven a ſouth and by eaſt Moone.

At Marckell, la Honge, Barfleur, Sherborough, and C. de Hage by the ſhore, a ſouth and by eaſt moone.

From Seynhead to Barfleur, the flood falleth by the land eaſt and by north and the ebbe weſt and by ſouth. But in the channel a ſeaboarde the land, the flood falleth away eaſtnortheaſt, and the ebbe weſtſouthweſt.

At Cape de Hague by the ſhore, a S. and by E. moone maketh wigh water.

In the Race off Blankert a north and by eaſt, and ſouth and by weſt moone. The flood falleth through the Race northeaſt, and the ebbe ſouthweſt.

In the Ilands alſo a north and by eaſt, and ſouth and by weſt moone maketh a full ſea. Men cannot well reckon the tydes there: becauſe they have divers courſes about the Ilands, but for the moſt part northeaſt and by north. A quarter of the tyde, the flood falleth thwart into the Caskets.

In Garnſey a north and by eaſt, and ſouth and by weſt moon maketh full ſea.

At Concalle and Granville a weſtnorthweſt moone.

At S. Malloes an eaſt and weſt moone maketh high water.

The flood falleth in there at the weſter channell; and goeth out againe at the eaſter channell, men muſt reckon thereupon when they will ſayle into theſe channels.

From the Iland Briack in the bay of Benit, the flood falleth ſoutheaſt, but in the fareway eaſtſoutheaſt and W. N. W.

At the eaſt-ſide off the Iland Briack in the road ſouthſoutheaſt. An eaſt & weſt moon maketh there the higheſt water.

Betwixt the Ilands Briack and Garneſey, a weſtſouthweſt moone maketh full ſea, the flood runneth there eaſtſoutheaſt, and the ebbe weſtnorthweſt.

On the coaſt, and within the Caskets, the tyde runneth continually againſt the Sunne, ſo that it is there never ſtill water.

Betwixt Septs Iſles, or the ſeven Ilands, and Garnſey in the fareway, a weſtſouthweſt moone maketh full ſea.

Betwixt Briack and the ſeven Ilands, an eaſt and by north, and weſt and by ſouth moone maketh full ſea. The flood falleth there eaſt and eaſt and by ſouth.

Betwixt the ſeven Ilands and the outer rockes off Morlions, the flood falleth in ſoutheaſt within the Triacle Pottes towardes the Green-Iland, but in the fareway in the offing, eaſt and eaſt and by north.

At Morlaix and S. Pauls maketh higheſt water a weſt and by ſouth Moon, but in the fareway in the offing thwart of it, a ſouthweſt and by weſt, and weſtſouthweſt Moone.

At the Iſle de Bas maketh high water a W. and by S. moone.

In the fareway there in the offing, the flood falleth E. N. E. and the ebbe W. S. W. and ſo likewiſe from thence all alongſt the coaſt of Bretaigne, unto the Fourne or Ushant.

Betwixt Dower and Dongie Neſſe, and likewiſe thwart of the Neſſe, a S. S. W. moone maketh full ſea.

From Dongie Neſſe to Dover, the flood falleth northeaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

Of the Depths.

Before Diep, men may ſee the land in twenty and two and twenty fathom.

About foure leagues without Struyſaert it is deep 20 fathom.

Between Diep & Seynhead ſtand alſo many sharpe towers, trees and houſes upon the land. Struyſaert is beſt to be knowne on a great rock like a high Tower, thwart of it in the fareway it is deepe 16 and 17 fathom.

About C. de Berfleur and Sherbrough foure leagues from the Iland, it is deepe thirty fathom.

Barfleur is a high poynt, below upon the white land ſtandeth a flat Tower, two milles, and ſome litle houſes, and to the weſtwards of it is more white land.

Upon Cape de Hague ſtandeth a Caſtle, with a litle turret; a litle to the eaſtwards of it in the land ſtandeth a sharp Tower. Two leagues to the eaſtwards off it lyeth Sherborough with a flat ſteeple.

The Iland Ornay is upon the weſt end high with a ſteep going down poynt: the eaſt end is hilly, or with hommocks, but lower then the weſt end, in ſayling by it, men may ſee upon it a Tower or two with ſome milles. Upon the north ſide of the Iland lyeth a white hill like a ſand-hill.

To the northwards of the Caskets, two leagues from land it is deep 35 and 40 fathom.

Betwixt the Caskets and Garneſey it is 35 and 40 fathom deep, moſt all ſtony ground.

Northweſt about foure leagues from Garneſey is a pit where it is 80 or 90 fathom deepe, els it is thereabours 40 fathom deep.

Betwixt Ornay and Iarſey it is deep 20 and 25 fathom.

In the fareway of Iarſey, Rockduve and the Iland Briack, it is deep 20, and 25, and 30 fathom.

About the Triacle Pots alongſt the coaſt it is 45 and 50 fathom deep, in ſuch depths men may ſee the land thereabouts. By night it is not good to come nearer that coaſt and the ſeven Ilands, then in 45 fathom.

Thwart of S. Paul de Lion, and the Iſle off Bas, 5 leagues from the land it is deep 45 and 50 fathom.

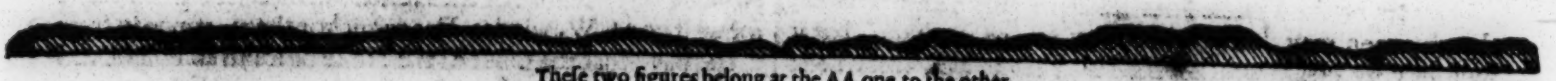
Courſes and Diſtances.

From Treſprot to Diep ſouthweſt	7 leagues
From Diep to Facam, W. S. W.	11 leagues
From Fecam to Struyſaert S. W. and by W.	3 leagues
From Struyſaert to Seynhead, the courſe is S. S. W.	two great leagues
From Seynhead to Caen in the Foſſe, the courſe is S. S. VV.	6 or 7 leagues
From Blackneſſe to Diep ſouthſouthweſt and ſouthweſt and by ſouth	17 leag.
From Blackneſſe to Struyſaert, or C. de Caux, ſouthweſt and by ſouth, ſomewhat weſterly	19 leagues
From Blackneſſe to the Caskets, the courſe is weſtſouthweſt	48 leagues
From Blackneſſe to VVight VV. ſomewhat ſoutherly,	37 leagues.
From Blackneſſe to Beachy VV.	20 leagues
From Diep to VVight, the courſe is VV. N. VV.	37 leagues.
From Diep to Beachy northweſt	21 leagues
From Diep to Dover north,	twenty three or 24 leagues
From Seynhead to Diervliet, or the poynt off Sherburgh, weſt, ſomewhat northerly	20 leagues
From Seynhead to Portland northweſt and by weſt	38 leagues
From Struyſaert to the eaſt end of VVight, northweſt northerley	29 leagues
From Struyſaert to Beachy, north	23 or 24 leagues
From Struyſaert to Fairlye, north and by eaſt,	27 leagues
From Struyſaert to the poynt of Dover, the courſe is northnortheaſt	33 leag.
From Caen to Dierfliet, or the poynt of Barfleur northweſt	16 leagues
From Dierfliet to Cape de Hague weſt and by north	8 leagues
From C. de Hague to the outermoſt of the Caskets VV. and by N.	8 leagues
From the Caskets to Beachy N. E. and by E.	37 leagues
From the Caskets to VVight n. e. and by n.	20 leagues
From the Caskets to Portland north and by w.	13 leagues
From the Caskets to the Steart w. n. w.	19 leagues
From the Caskets to Silly w. ſomewhat northerly	56 leagues
From C. de Hague to C. de Voorha, ſ. and by e.	7 leagues
From C. de Voorha to Granville ſ. ſ. e.	9 leagues
From Granville to Mount S. Michiel ſ. ſ. e.	5 leagues
From Granville to the poynt of Concalle, ſ. w.	5 leagues
From the poynt off Concalle to the eaſter channell off S. Malloes w. and w. and by ſouth	5 leagues
From the Iland Siſember, before S. Malloes unto cape de Farrele w.	4 or 5 lea.
From C. de Farrele to the Iland Briack w. and by north,	9 or 10 leagues
From the Iland Briack to the Pickelles w. and by ſouth,	2 leagues
From the Pickels to the 7 Ilands, w. ſ. w.	5 leagues
From the 7 Ilands to the Triacle Pots w. ſ. w.	4 leagues
From the Triacle Pots to the Ile de Bas, w. ſ. w.	9 leagues
From Ile de Bas to Ushant w. ſ. w.	16 leagues
From C. de Hague to the weſt end of Iarſey betwixt Sarck and Iarſey through ſouthſouthweſt	9 leagues
From the Caskets to the w. end of Garneſey ſ. w. and by ſ.	5 or 6 leagues
From Garnſey to Iarſey ſ. e. and by e.	7 leagues
From Garnſey to S. Malloes ſ. ſ. e.	16 leagues
From the ſouth end of Iarſey to S. Malloes. ſ. ſ. e.	9 or 10 leagues
From Garnſey to the rockes Rockduves, ſ. ſ. w.	8 or 9 leagues
From Rockduves to Manckiers e. and by ſouth,	9 or 20 leagues
From Rockduves to C. de Farella ſ. e.	20 leagues
From Rockduves to the rock Camine ſouth and by w.	4 leagues
From Rockeduves to the Iland Briack ſ. and by w.	5 leagues
From Garneſey to the ſeven Ilands ſouthweſt and by ſouth.	15 or 16 leagues
From the Caskets to S. Paul de Lion ſ. w.	29 leagues
From the Caskets to the Fourne or Ushant ſ. w. and by w.	45 leagues
From the Caskets to the Lizard, w. and w. and by north	37 leagues
From Garneſey to the Lizart, w. and by n.	37 leagues
From the ſeven Ilands to the Lizart n. w. and by w.	29 leagues
From the ſeven Ilands to the Staert n. and by w. weſterly,	24 leagues
From the 7 Ilands to Portland n. e. and by n.	32 leagues
From S. Paul de Lion to the Lizart n. w. and by north	29 leagues
From S. Paul de Lion to the Steart n. and by e.	29 leagues
From S. Paul de Lion to Portland n. e. and by n.	40 leagues
From Dover to Dongie Neſſe ſ. w. and by w.	9 leagues
From the Neſſe to Fairlee, w. ſ. w.	3 leagues

Heights.

The poynt of Struyſaert in	45 degr. 45 min.
The Caskets lye in	45 degr. 48 min.
The ſeven Ilands, or Sept Iſles in	50 degrees
Beachy lyeth in	40 degr. 48 min.

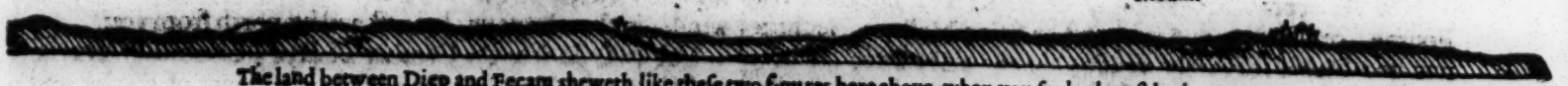
How theſe Lands doe ſhew themſelves at ſea.



Theſe two figures belong at the AA one to the other.

Grand valley.

Fecam.



The land between Diep and Fecam sheweth like theſe two figures here above, when you ſayle alongſt by it, two or three leagues without the land.

Seynhead Struyſaert.



The forme of Struyſaert, and Seynhead, when you ſayle alongſt by them.



Thus sheweth the land of Cane, when you are foure leagues off from it.



Thus sheweth the land of Sherborow, and the land to the weſtwards of it towards C. de Hague, when it is ſoutheaſt 4 leagues off from you.

That

Weymouth
Slot
Slot
Poort
Landt
S. Andries Landt
Studlandt
Sandwich
tRas van Poordlandt
Pol
Hansast point
Sandwich
Bay
Hurst cast
Calshot cast
Hampton
Porsm
Nieuport
Eylandt
Wicht
Walferts horn
Weembrugh
Ornay
Ornay
C. de la Hogue
tRas van Blankenberge ofte Ornay

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Engelsche en Franſche mylen 20 in een graedt

De Cuſte van Engelant
tuſſchen
Fierley en Poorlant

Checeſter

Arundel

Selſey

Bramber

Nieuwer haven

Cuckmer haven

Beveſier

Fierley

30

29

Lezard

Troupe

Porgin

Vaelmouth

Mans mast

Fowyck

Westlopen

Aelbrek

Egdcomb

Vissehers dorp

Plesmuyen

Kalkraker

Koombrook

Aegelow

Vemberse

Aeruskeen

Ideslon

Ialmuyden

I.S. Michiels

Bult point

Sterrepoint

Goutlant

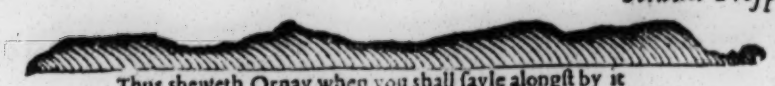
Duytſche mijlen 15. in een graedt
Lieues d'Allemaigne 15 en un degre
Spaenſche mijlen 17½. in een graedt
Lieues d'Eſpaigne 17½ en un degre
Iſche en Franſche mijlen 20. in een graedt
ues Anglois et Franc. 20 en un degre

Les Costes d'Angleterre de Fierley jusques a Lezard

De Custe van Engelant tusschen Poortlant en Lezard

Excester
Tingmouth
Darmouth
Dortmuyen
Torbay
Poortlandt
Kasquettes. affre
Biscaeyen
Rochee.

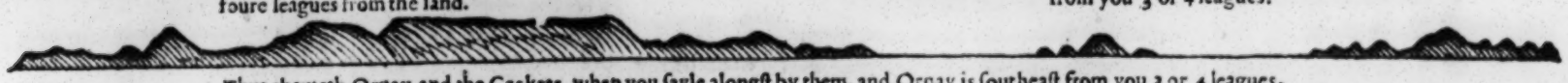
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Thus sheweth Ornay when you shall sayle alongst by it foure leagues from the land.



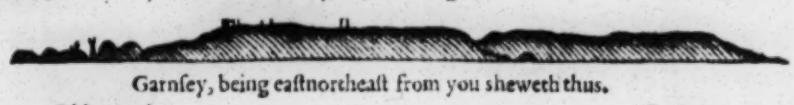
Thus sheweth Ornay with the Caskets, when it is southsoutheast from you 3 or 4 leagues.



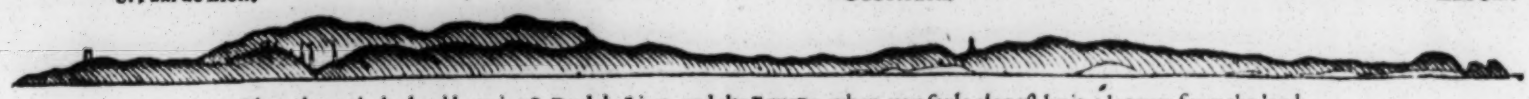
Thus sheweth Ornay and the Caskets, when you sayle alongst by them, and Ornay is southeast from you 3 or 4 leagues.



Thus sheweth Garnsey when it is thwart of you about 4 leagues, S. Paul de Lion.



Garnsey, being eastnortheast from you sheweth thus. Obbevrack. La Four.



Thus sheweth the land betwixt S. Paul de Lion, and the Fourne, when you sayle alongst by it 4 leagues from the land.

The Second Demonstration,

Wherein In deciphered the Coast of England from Fierley to the Lizart.

Road under Beachy.

THE point of the Neſſe and Beachy lye weſtſouthweſt and eaſtnortheaſt diſtant 8 leagues. Beachy is by the ſeven white Cleeves, the beſt knowne land that a man can ſee any where. To the eaſtwards of Beachy men may anckor for weſterly windes in ſix or ſeven fathom, ſo that the point be ſouth, and ſouth and by weſt from you. To the weſtwards of the poynt of Beachy, thwart of the weſt end of the 7 Cleeves, right againſt the Chindle, where men run alongſt by into new Haven, men may alſo anckor in 7, 8, or 9 fathom.

A league and a half to the eaſtwards of the point of Beachy, neareſt E. N. E. from the point lieth a little ſand, upon which there is at low water and ſpring-tydes ſcarce two fathom.

New-haven.

At the weſt end of the ſeven Cleeves lieth the River of Cuckmer-haven, or New-haven, which hath two entries, the weſtermoſt entry lieth in by the weſt lād, but is not to be uſed, but onely with very ſmall ſhipping, it falleth altogether dry, the eaſtermoſt is commonly the beſt, and lieth northweſt and by weſt in, there is at high water with a common tyde not more then ſeven, and with a ſpring-tyde, 14 or 15 foot water; within, the ſhips lye every tyde dry: But before the village they remaine a float, there they morre with foure cables faſt on 2 green ſhores. Upon theſe entries men cannot well make any reckoning, they keep no certaine depth, when it bloweth a ſtorme out of the ſouth, they are oftentimes caſt too with a chindle, and opened againe with a freſhut.

Shorum.

Shorum is a tyde-haven, where is at high water and ſpring-tydes 18 foote water, but at low water there remaineth no more then 3 foot water, ſo that then it floweth 15 foot up and down. With a common tyde at high water there is 12 foot, and at low water 3 foot depth. The town Shorum lieth a little Engliſh mile within the haven, ſhips (that draw but 8 or 9 foot water) can lie a float a little beneath the towne at low water, or elſe they lye dry every where.

When you come from the eaſtwards from Beachy or New-haven along by the ſhoare, you may ſee open into the Haven, before you come thwart of it: But comming from the weſtward, you ſhall not ſee it open before you come right before it, becauſe the weſt point lieth ſomewhat further out then the eaſt point. From the weſt point runneth off a little tayle', but at high water you may runne in alongſt over it, otherwiſe you muſt runne in by the eaſt ſhore. Upon the eaſt point ſtand two beacons, which you muſt bring one in the other, and run in ſo right with them, untill you come by the north ſhore, and then in alongſt by the foreſaid north ſhore.

Arundell.

At Shorum ſomtimes there are builded many great ſhips of 3 or 400 tunnes.

About 8 leag. to the weſtwards of New-haven lieth Arondell, a tyde-haven, where a ſhip may go in at half Flood, you muſt go in thereby the weſt land northeaſt in. In the entry it is two, and betwixt the two lands 3 fathom deep at high water: but within the haven remaineth at low water 4 and 5 fathom: There you muſt anckor before the village.

Owen.

Five leagues W. S. W. from Arondell, and 13 leagues weſt and by ſouth ſomewhat weſterly from Beachy, lye the bancks or ſhowlds of the Owers under water, a great league and a halfe ſeaboard the land.

Faſtborough-head.

About 2 leagues E. N. E. ſomewhat eaſterly from the ſouth ſide of the Owers, and two little leagues ſouth from Arondell lieth a showld of rocks and chindles, called Faſt-borough-head, as great as an aker of land, which falleth (at low water and ſpring-tide) dry, otherwiſe it commeth not above water, cloſe to it, it is 15 fathom deep. They that ſayle off from the haven of Shorum, and are bound to the weſtwards, muſt not go more weſterly then S.S.W. untill they come in 18 fathom, before they ſet their courſe more weſterly, for feare of this ſhowld. About an Engliſh mile N. W. from this foreſaid ſhowld, lieth alſo a ſunken rock, whereupon at low water it is no more then 5 or 6 foot water.

About halfe waies, betwixt Arondell and Selſey, runneth off a ledge of Rocks thwart to the ſouthwards from the ſhoare about an Engliſh mile and a halfe into the ſea, called the Bogners, whereof ſome of the rocks fall dry at low water, but the outermoſt are alwaies under water.

The Owers.

The ſhowldes or bankes of the Owers, lie about 4 leagues to the eaſtwards of Wight, and lie off a league and a halfe from the land, thwart of them ſtandeth a tower in the land, when that is north northweſt from you, then are you thwart of the ſouthermoſt part of the ſhowld; And if you keep the Culver cliffe of Wight weſt and by north, and weſtnorthweſt from you, comming either from the eaſt or from the weſt, you can teke no hurt of the Owers, you may run alongſt by them in twelve fathom upon your lead, without danger. If you ſayle away from the eaſt end of Wight, eaſt and by north, and eaſtnortheaſt, you ſhall run in 12 fathom alongſt over the eaſt end of them. He that is there well acquainted, may alſo ſayle to the N. wards of them, through betweene the land and the Owers.

Culver-cliffe.

Betwixt the Owers and Portſmouth goeth in a great ſound or haven, within lieth the town of Chicheſter.

Chicheſter.

At both the ſides of the Iland Wight men may ſayle within it, and there come to ankor either under S. Ellens, or before Newport where they will.

For to sayl in at the eaſt end of Wight.

For to ſayle into the eaſtwards of Wight you muſt bring the eaſter caſtle that lieth to the eaſtwards of Portſmouth over the Lyme-kill (that is, a white ſpot in the land to the northwards of that Caſtle) and keepe them ſo one over the other, untill that the Culver cliffe come within or under the northeaſt point of Wight. Then bring the Limekill over the eaſt end of Portſmouth, and keep them ſo untill that the caſtle to the weſtwards of Portſmouth come to the wood: Thus doing you ſhall not come neare neither plate nor ſand, to take any hurt of them, and you ſhall come ſo by little and little, before S. Ellens Church. When the Church come two ſhips length within the red point; then you ſhall not come too neare the riffe at the point. Or elſe if you cannot ſee the Lyme-kill, then keepe the Caſtle to the weſtwards of the Culver cliffe, untill that S. Ellens Church come a ſhippes length without the point of the Iland, goe then boldly northweſt in, and you ſhall not come too neare the riffe; And then bring the ſquare Tower betwixt the eaſt end of Portſmouth, and the Caſtle: when the caſtle to the weſtwards of Portſmouth commeth to the eaſt ſide of the wood, then you ſhall not (as here before is ſaid) come too neare neither the plate nor the ſand to take any hurt of them.

Marcks of the plate.

When the eaſtermoſt white ſpot ſtandeth a ſhips length to the weſtwards of the caſtle, then you are to the eaſtwards of the riffe; and when the Culver cliffe is covered or hidden behind the northeaſt poynt of the Iland, then are you alſo within the riffe. The markes of the little plate are theſe: there ſtandeth a ſquare tower within the land, and a caſtle on the water ſide to the E. wards of Portſmouth, thwart from it lyeth the foreſayd Lime-kill: when that commeth to the E. wards of

the foreſayd Caſtle, ſo that you may even ſee through betwixt them both, then are you upon the little plate which at low water is not deeper then 10 foot: then ſtandeth the caſtle to the weſtwards of Portſmouth at the weſt ſide of the wood. But when the foreſayd ſquare tower commeth to the weſt ſide to the foot of the Caſtle and the Caſtle by weſt Portſmouth to the weſt ſide of the Wood, there it is deepe at low water upon the little plate 12 foot.

When the ſquare Tower ſtandeth betwixt the eaſt end of Portſmouth; and the caſtle even betwixt the Lyme-pit and the Tower, and the Caſtle by weſt Portſmouth in the weſt ſide off the wood, there it is at high water, tenne fathom deepe.

When Saint Ellens Church lyeth ſouthweſt and by weſt from you, then lyeth the ſoutheaſt end of the plate northeaſt and by north from you, and the weſt end north and by eaſt.

Nomans-and. From the poynt off the Roade off Newport eaſtwards lyeth a broad ſand alongſt the ſhoare, called Nomans-land, which falleth allmoſt dry at low water, it is ſo ſteepe, that halfe a cables length off from it, it is twelve fathom deepe: upon the high land of Wight thereabouts ſtand two or three milles. If you come neare the ſhore, that the foreſayd milles bee hidden behinde the foreſayd high land, you ſhall not miſſe to come aground againſt that foreſayd ſand, but ſo long as you can ſee theſe milles, you ſhall goe cleare of it.

The Roade off the Cowes is the beſt Roade in Wight. Over againſt, betwixt that and Calſhot Caſtle, lyeth a hard ſand neareſt the north ſhoare, lying from thence to the weſtwards alongſt the fareway, almoſt ſo farre as thwart of Newton, called the Brambles; at low water and ſpring-tydes it falleth almoſt dry, and then the ſea breaketh much upon it: to the northwards of it goeth alſo a channell through, but it is not to be uſed, but with ſmall ſhipping.

The Brambles.

For to ſayl in at the Needles. For to ſayle in at the weſt end off Wight, you muſt runne right in with the Needles, (they are high ſharpe Rockes a Maſtes lying at the Weſt end of Wight) bring then the innermoſt poynt off Wight, or the Caſtle that ſtandeth upon the chindle over againſt that poynt, called Hus caſtle a little without, or to the northwards of the Needles, ſayle in thereupon, untill you come to the Needles, leave them then on the ſtarboard ſide of you, and run in within a cables length alongſt by them for to avoyd the bancks which lye off from the chindle to the northwards of the Needles, of the weſt end of Wight allmoſt to the Needles. Betwixt the banckes called the Swingels, and the Needles, it is not very broad, and at low water 5 fathom deep. When you ſayle in here, you muſt caſt your tydes well. The fore-flood falleth ſtrong upon the banckes. When you are then come within the Needles, then edge a little more off from the ſhoare unto Hus Caſtle that ſtandeth upon the Chindle, for to avoyd ſome Rockes which lye alongſt by the Iland under Water. Being come within the Caſtle or Chindle, there it is wyde and broad, leave two third parts of the channell on the larboard ſide, and one third part on the ſtarboard ſide, ſayle ſo in untill you come before the village Newton, and anckor there in nine or ten fathom, or elſe ſayle forth (if you will) about the point of the Cowes, and anckor there before the haven of Newport in tenne or twelve fathom, there is the beſt Roade, and the beſt lying of all the Roades in Wight. The Haven or Roade before Newport lyeth from the foreſayd Hus Caſtle upon the Chindle northeaſt and by eaſt, and eaſtnortheaſt about two leagues aſunder.

From the Needles of Wight weſt and by ſouth about three leagues, lyeth the poynt of Saint Albons-land, called Peverell poynt, from it lye off ſome little Rockes to the eaſtwards.

Peverel poynt Sandwitch Bay. A little to the northwards off that poynt is a Baye, called the Bay of Sandwitch, there is a good road for them that are bound to the Weſtwards; If you will goe to ryde there coming from the Weſtwards, you may take the ſounding of Saint Albons land, and runne aboard the poynt in foure or five fathom at a halfe flood, and you ſhall take no hurt of thoſe little rockes. Being gotten about the poynt, edge by it up to the weſtwards towards Sandwitch. A little to the northwards of Sandwitch in the Baye, lyeth a round Hommock, & thwart off it ſomewhat within the land ſtandeth a mill; bring that mill to the ſouth ſide of the round Hommock, and ſayle ſo in untill you come in foure or three fathom, and anckor there ſo deepe or ſhowld as you will, there it is good lying for ſouthweſt or ſouthſouthweſt winds.

A little league north and by eaſt from the foreſayd point, right weſt from the Needles of Wight, lyeth another point, called Handfaſt poynt, to the northwards of it lyeth a little Towne, called Studland, before it is alſo a good roade. Upon the outermoſt part of that poynt, is a hole through the land, where men may ſee through, and a little without the poynt ſtandeth a high ſteepe rocke like a Maſt, allmoſt like the Needle at the weſt end of Wight. For to come to ride before Studland: you muſt ſayle about the ſecond poynt, with the hole or the ſteepe rocke, in foure or five fathom, and goe in W.N.W. towards Studland: a litle to the ſouthwards of it lyeth a little valley, bring that W.S.W. from you, and goe towards the ſhoare, in foure or three fathom and a halfe, there is the beſt roade, & lying there, you may ſee the foreſayd hole in the point.

Handfaſt poynt. Studland.

A league to the northwards of that foreſayd poynt with the hole, lyeth the haven of Poole; for to ſayle in there, comming about the foreſayd ſecond poynt with the ſteepe rocke, you muſt goe on northweſt, or ſomewhat more northerly, and then you ſhall ſee right a head of you, a high flat hill, which ſtandeth higher than the one other land there abouts, keepe that betwixt the two ſhoares, and run in ſo right with. If you muſt turne toe and againe, then ſpare not to uſe your lead, and runne not further over to the weſtwards, then that the flat hill come to the weſt-land, ſo ſoone as it beginneth (as it were) to touch it, you muſt caſt about, or elſe you ſhould be faſt aground: And after you have caſt about, runne not further over to the eaſtwards, then that the foreſayd high flat hill commeth even to the eaſt ſand-hill, which is a high, gray, and ſharp ſand-hill, lying at the Eaſt ſide. If you keepe theſe foreſayd markes in this manner, you ſhall have there going in at halfe flood, water enough, there remaineth upon the ſhowldeſt at low water, ten and eleven foote, but it floweth there no more then five foot up and downe. It floweth there twice in a tyde. A ſoutheaſt and northweſt Moone maketh there full ſea: Alſo a ſouth & by eaſt & north & by weſt Moone once more, that commeth to paſſe by reaſon off the fore-ebbe that commeth out of Wight. When you come within the entry, go then northnortheaſt on, and keepe the beacons that ſtand on the eaſt land on the ſtarboard off you, and runne indifferent cloſe alongſt by them. The ſhoares are on both ſides ſteepe, and the channell is not wide, without the channell it is ſhowld or flat. This Pilots water.

Poole.

From the weſt end of Wight to the point of Portland, the courſe is W.S.W. eleven leagues, but from Dunnoſe, the S.W. poynt off Wight, weſt and by ſouth thirteene leagues.

Portland.

If you will goe to anckor under Portland (comming from the weſt, then come within two cables length, or a ſhot of a caſt peece about by the poynt of Portland, and being come about the ſecond poynt, edge up to the weſtwards untill you come before the caſtle, and anckor there in 7, 8, 9, 10, or 11, fathom; ſo that the poynt of Portland doe lye ſouth and by eaſt, and S.S.E. from you, there you ſhall lye land-lockt for a S. and S. by E. winde. With a ſouthweſt and a S.S.W. winde, men muſt be very mindfull of terrible rippeling of the race of Portland, which beginneth a little to the weſtwards of Portland, and endeth a little to the weſtwards of S. Albons. The ground in that race is alſo very uneven, and ſhowld, ſometimes ſeven, otherwhiles ten, and alſo fifteen fathom deepe.

Road under Portland.

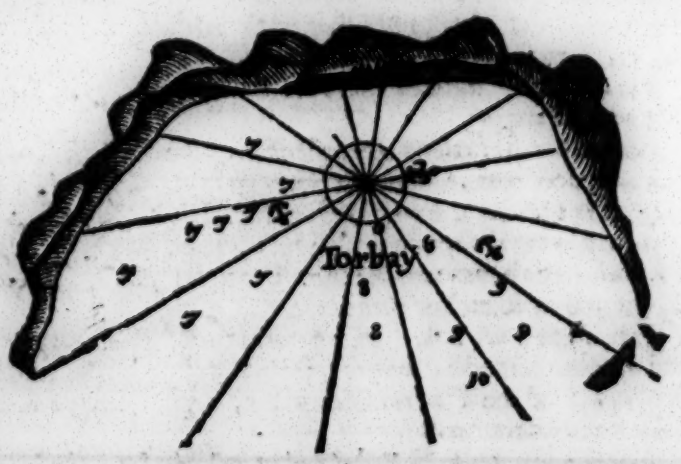
About a league to the northward of the road of Portland lyeth a little Towne, called Waymouth, with a tyde-haven, before it men may anckor in 4 or 5 fathom.

Waymouth.

From Portland to Exmouth, the courſe is weſtnorthweſt thirteene leagues; betwixt them both lyeth a little Iland cloſe by the land called Cob. Before Exmouth men may ride (at the ſouth end of the Chindle, which lyeth before the haven) in ſeven or eight fathom, ſo that the rockes of Tomanſtones doe come to lye ſouth and ſouth and by eaſt from you, there it is good ground, and landlockt for a ſouth winde.

I. Cobs

TORBAY.



Five leagues ſouth and ſouth and by weſt from Exmouth lyeth Torbay, and lyeth from Portland weſt, and weſt and by ſouth diſtant thirteene leagues.

Torbay.

For

For to goe into the roade of Torbay, you muſt bring the weſt poynt ſouth and by eaſt and ſouthſoutheaſt from you and anckor there in 7 or 8 fathom, you ſhall lye land-lockt for ſouth and ſouthweſt windes. At the northeaſt ſide of the bay is alſo a tyde-haven, before it, it is good anckor ground in foure or five fathom, according as you will lye neare or farre from the ſhoare.

Dartmouth. Three or foure leagues ſouthwards, or to the weſtwards of Torbay, lyeth the haven of Dartmouth, which hath a narrow entry, lying in betwixt two high lands, upon each ſide of the haven ſtandeth a little Caſtle, in time of warres they were wont to ſhut it over with a chaine, on the Weſt-ſide ſtandeth a litle Church on the high land. For to ſayle in there comming from the Steart or from the weſtwards you muſt run in alongſt by the weſterland, ſo farre to the eaſtwards untill you bring the kay of the village (that lyeth on the eaſt ſide of the haven) in the middeſt of the entry of the haven, and ſayle ſo in, keeping the middeſt of the haven betwixt the two lands, and you muſt bee very ready with the boat (if there ſhould come any foreflauges from of the high land) for to row in. Being come in, edge over to the weſt-ſide, before the Brewhouſe, and anckor there in ten or twelve fathom, or before the village on the eaſt-ſide where you pleaſe.

At the eaſt-ſide of the Range lyeth a ſuncken Rock, the markes for to avoyd it are theſe. To the eaſtwards of Dartmouth is a red poynt, which below by the water is black, and in the red lyeth a white ſtone, when the white ſtone commeth over the black poynt, then are you thwart of the ſuncken rock, but if you ſee the kay of the village and doe as before is ſayd, then you ſhall not come to neare that ſuncken rock to take any hurt of it.

Betwixt Dartmouth and the ſteart, neareſt to Dartmouth ſtandeth a ſpire ſteeple indifferent high and white, called Tackman, that is a very good marke to know the haven of Dartmouth by it.

The ſteart lyeth from Dartmouth ſouthweſt diſtant three leagues. Under the poynt of the Steart at the eaſt ſide is a good roade for weſterly windes, betwixt the little Church that ſtandeth upon the high land, and the point of the ſteart in tenne or eleven fathom, ſo that the poynt lye ſouthweſt from you.

Salkom. A little to the eaſtwards of the weſtermoſt poynt of the Steart lyeth a haven, called Salkom, when you come from the weſt, it ſheweth it ſelfe open, the weſt ſide of it is ragged and the eaſt ſide goeth ſloping downe, cloſe to the Weſt-poynt lyeth a rocke, or a rane of rockes, therefore you muſt give it a good birth, and leave the rockes on the larboard-ſide: Further, you may ſee the breaks that can doe you hurt. Being come within the point, you can take no hurt of neither of both ſhoares. Upon the barre or ſhowldes of the entry remaineth at low water with a ſpring-tyde, not loſſe then eleven foot water, and again within it is at leaſt three fathom deep.

Plymouth Mewe-ſtone. Sixe leagues to the weſtwards of the Steart lyeth the ſound of Plymmouth, at the outermoſt Eaſt poynt of the ſound lyeth a high round rock, called Mewеſtone, the weſt poynt is called Ramehead, betwixt them both goeth in the ſouth Plymmouth North northeaſt in, it is broad and deepe. A little to the northwards of Ramehead is a faire ſand-bay, where men may anckor cloſe under the land, in nine and tenne fathom. Three leagues ſouth a little eaſterly from Ramehead, lyeth a Rock above water, called Eddy-ſtone. The point of Plymmouth lyeth from the Eddyſtone north and by eaſt, and north-northeaſt, diſtant about foure leagues. In the ſound by the land of Plymmouth, lieth a little Iland, which is faſt to the weſt ſide with a riffe or rane of Rocks under water, ſo that men muſt ſayle alongſt to the eaſtwards of it, whether they be bound into Catwater, or into Hamoaſe, the weſt harbrough.

Eddy-ſtone.

Catwater. If you will goe into Catwater, then runne in betwixt the Iland, and the poynt on the eaſt ſide in with the land of Plymmouth, untill that you ſee Catwater open on ſtarboard ſide of you, goe then into the eaſtwards betwixt the point of Plymmouth, and the foreſaid Eaſt poynt on the ſtarboard ſide of you, leaving the moſt part the channell on the ſtarboard ſide of you, until you come within the point, and anckor there right againſt that high ſteepe norther-land, there is at low Water with an ordinary tyde foure and five fathom deepe.

When you ſayle into Catwater, you muſt take heed, and give a good birth to the ſouther point of the entry of Catwater, for there lye off to the foreſaid point, a ledge of Rocks under water, neare about two cables lengths from the Land, and upon the point of the ledge or ſhowld, lieth a buye, where is at halfe flood about twelve foot water, which buye you muſt leave on your ſtarboard ſide in going into Cat-water, and when you have Cat-water altogether open, you may run into the eaſtwards, leaving (in the entry of the harbour) two third parts of the channell on the ſtarboard ſide, as before is ſayd, becauſe the ſouth ſhoare is ſomewhat flat off, there lying a ſandy bancke, which reacheth to the ſecond poynt of the ſouth ſhoare of Cat-water.

A little to the Eaſtwards of that foreſayd little Iland, lyeth a rocke under water, upon which it is at low water not deeper then two fathom. For to ſayle within the Iland, you may goe into the eaſtwards, or to the weſtwards of the rock according as occaſion ſhall ſerve. If you wil ſayle into Hamoaſe, to the weſtwards of the rock, then take the ſounding of the Iland in foure or five fathom at low water, and runne in ſo by it, untill that the Viſher Village (lying to the northwards a little within the land) come in the weſt ſide of the valley on the north ſhoare, then are you to run through betweene the Iland and the rocke, and to the weſtwards of the rock. Within the Iland upon the land of Plymmouth, ſtandeth a wall or hedge, when as you ſee that onendling, and the chappell of the foreſayd Fiſher-village commeth to the north-ſide off the Valley, and Cat-water commeth open, then doe you runne over the Rocke. Betweene the Iland and the maine men may anckor in 12 and thirteene fathom.

Hamoaſe. If you bee bound into Hamoaſe, you muſt runne in betweene the Iland and the land of Plymmouth, and then in a-middeſt the channell betweene the two Lands, untill that the entry of Hamoaſe be open, runne then into the northwards, as the channel leadeth, untill you come in about the weſt poynt, and anckor there in ſixteen, fifteen, and twelve, or ten fathom. In the narrow it is fifteene, ſixteene, ſeventeene, and alſo twenty fathom deepe, and betweene the Iland and the maine, eight, nine, tenne, and twelve fathom.

The Germen a ſuncken rock. About halfe a cables length to the eaſtwards of the Paſſage way going into Hamoaſe, lyeth a ſuncken rock under water, called the German, about two great ſhippes lengths from the ſhoare and at low water hath not above foure foot water upon it. And when men doe come any thing neare this foreſayd ſuncken rock going into Hamoaſe, either with the flood or the ebbe, the tyde wil ſet them right upon it, if it bee calme. Therefore to avoyd it, men muſt (with calme weather) give this foreſayd ſuncken rock a good birth, untill they bring the houſes of the Fiſhers-Village, called the Stone-houſe, open of the eaſter-poynt of the Paſſage way, and then runne in over towards the north ſhoare, untill they have hidden the Iland in the foreſayd eaſter-poynt of the paſſage way, for to avoyd a ſuncken Rock that lyeth off to the eaſtwards from the north-poynt of the Beach off the Weſt-ſide of the paſſage way, a halfe cables length of, and then runne amids the channell into Hamoaſe. Upon this foreſayd ſuncken Rock at low water, is not above 3 or 4 foot water.

Suncken rock.

Suncken rocks. In the ſound of Plymmouth, not farre to the northwards of the Meweſtone, lye two or three ſuncken rockes, upon which remaine at low water not more then three or foure fathom water, the markes of them are theſe: To the eaſtwards of Plymmouth ſtandeth a Tower with a Mill, and to the Weſtwards off the foreſayd little Iland, ſtandeth a Gentlemans houſe, when the little tower or turret of that houſe commeth over the poynt on the weſt ſide of the Iland, and the foreſayd Tower and Mill to the Eaſtwards of Plymmouth come one over the other, then are you upon the innermoſt ſuncken rocke or ſhowld, which at low water foure fathom deepe. But when the poynt of Hamoaſe commeth even without the poynt to the weſtwards of the Iland, and the foreſayd Tower and mill alſo one in the other; Then are you upon the outermoſt rocke, where it is at low Water and ſpring-tyde three fathom and a halfe deepe.

From Kamehead weſtſouthweſt five leagues, lyeth Foy, and betwixt them on the coaſt lyeth a little Iland, a little to the eaſtwards of a poynt, called Talland-poynt, thwart of Weſt-Lowe, called Louw-Iland, you may anckor there to the eaſtwards of the Iland in 5 or 6 fathom.

Low Iland.

Foy. Foy is a broad haven, where a ſhip may go in at half flood, at the eaſt-ſide of the haven ſtandeth a little Church with a little ſteeple, and on the weſt ſide a white Church, ſomewhat greater then that upon the eaſt land, with a ſquare ſteeple at the weſt end of it.

For to ſayle into Foy, you muſt have at leaſt a halfe flood, and runne in midſt the channell betwixt the two poynts, and being come within, then chuſe which ſide you will, but the moſt water is by the weſt land, betweene the ſtakes and the Tower that ſtandeth upon the weſt land. Being come within the Stakes (as you come in by the weſt land) then beare ſomewhat off preſently from the weſt ſhoare, almoſt into the middle

middle of the channell, neareſt to the weſt ſhoare, untill you come before the Village that lyeth on the Weſt ſide, there is a deepe docke, where a ſhippe that draweth ſixteene foot water may lye a float at low water. In the ſayd dock may 3 or 4 ſhippes lye.

If (when you come in by the eaſt land) you deſire to bee in the foreſayd docke or poole, then ſayle in untill you come within the ſtakes, and then edge over off from the eaſt-land untill you come neareſt the weſt land; for to avoyd a Flat, which lyeth by the eaſt ſhoare alongſt the haven, and beginneth againſt the firſt houſe of the Weſt-Village. If it ſhould happen, that you could not lead it in with a ſayle, then let your anckor fall without the ſtakes, and warp in with hawſers, untill you come into the foreſayd poole.

You may alſo ſayle ſo farre in, that you may ſee a wall on the weſt ſide of the haven, where lyeth a village behinde it. A ſhippes length to the ſouthwards of that wall, it is good lying by the eaſt land, being morred by foure cables, there may alſo a ſhip ride a float that draweth ſixteene foot water. You may alſo ſayle further in alongſt by that Swach that lieth on the weſt ſide, wherein the mill ſtandeth, but come not to neare the north poynt of the Swach, for there by it lyeth a rock under water, being paſt that you may morre your ſhip in the middeſt of the channell, there is beſt lying for ſhippes that draw much water.

Dodman. Foure leagues ſouthweſt from Foy, lyeth the poynt of Dodman, and two leagues to the weſtwards of it lyeth the Haven off Falmouth. The poynt off the Dodman is double land with a round hill, which to the weſtwards goeth ſloping downe ſomewhat towards the weſt end ſtandeth a mill with a ſharp tower, and ſome little houſes upon the land, ſomwhat to the weſtwards, men may ſee the caſtle of Falmouth upon a round Hommocke againſt the high Land. This land is very good to known when you come from the weſt, or from the Lizart.

Upon the weſt poynt of the haven of Falmouth ſtandeth a Caſtle upon the high land and in the entry neareſt the weſt-ſide, lieth a great rock above water, you may ſayle about it or both ſides, at the inner ſide off the eaſt poynt lye alſo ſome rocks off from the ſhoare. For to ſayle in there to the eaſtwards, alongſt by the foreſayd Rocke, you muſt runne in within two cables lengths, alongſt by the eaſtland leaving the foreſayd rocks on the ſtarboard ſide, and the great rocke on the larboard ſide, and ſo ſayle right in with the high land that lyeth on the weſt ſide within the haven. Within in the haven ſtandeth on the Land a white Chalkye ſpot, alſo a little wood off trees, keepe them over the North poynt of the foreſayd high weſt-land, and ſayle ſo right in with them, keeping them ſo untill you come neare them, you ſhall finde ſo at halfe flood, upon the ſhowldeſt, not leſſe Water then five fathom, and that betwixt the foreſayd Caſtle upon the weſt poynt, and the eaſter Caſtle that ſtandeth on the eaſt ſide, within the haven, over againſt it, or a little within the Caſtles. When you ſhall then come by that foreſayd high weſt-land, runne alongſt by it, unto the north-end of the ſame, and anckor there in twelve, thirteene, or fourteene fathom. You may alſo from thence edge over towards the eaſt land, and anckor there under or behinde the banck, that lyeth off from the eaſter Caſtle alongſt the middle of the haven, in 6, 7 or 8 fathom: the banck falleth almoſt dry at low water, and is ſoft ground, ſo that the ſhippes ſit in the oaſe, when they come there a ground.

For to ſayle into the weſtwards off the foreſayd greet rock, you muſt take the ſounding of the weſt land, where the Caſtle ſtandeth upon, in five or ſix fathom, being ſomewhat within the rock, runne (as before is ſayd) towards the weſt-land. To the weſtwards of the rock it is in that channell ſix and ſeven fathom deepe at halfe flood, but in the channell to the eaſtwards of the rock, ſeven and eight fathom.

Foure leagues ſouth and by weſt from Falmouth lyeth the eaſt point of the Lizart, betwixt them both lyeth a haven, Helford. called Helford, which is little uſed of ſhippes. At the ſouth-ſide of the haven, lyeth a ſteepe poynt, and on the north ſide a low ſharp poynt. Within the haven on the ſouth-ſide, ſtandeth a Gentlemans houſe beneath at the ſtrand, and upon the hill ſtandeth a tuffe of trees, you muſt keepe theſe one in the other, and runne in ſo amiddeſt the channell into the entry of the haven. On the northſide ſtand alſo two or three trees, theſe come a maſts length to the weſtwards of a little houſe that ſtandeth in a white ſandy bay, thereupon you may ſayle in alſo amidſt the channell; it is a ſhort in-let, being come within, you may anckor in ſix or ſeven fathom. Upon the ſouth ſide ſtandeth alſo a ſharpe Tower, and upon the north ſide a little Caſtle upon the ſteepe land.

The Lizart hath trees poynts, the northermoſt is called the Blacke-head, from that too the ſecond the coaſte lyeth ſouthweſt and by weſt, & alongſt to the third about weſtſouthweſt, or weſt and by ſouth: from the ſecond or middlemoſt poynt, lye to ſeawards ſome rocks a cables length, or a cables length and a halfe off, called the Staggs.

To the northwards of the northermoſt, or eaſtermoſt poynt off the Lizart, betwixt Helford and the foreſayd poynt lye ſome rockes a great league off from the land, called the Mannackles; ſouth and by eaſt from the Harbrough off Falmouth, Mannacles. and eaſtnortheaſt from the foreſayd Blacke-head, where off many off them are above water at low water, and ſome of them at high water remaine uncovered. Betwixt them and the ſhoare it is very fowle and rocky, ſo that men cannot runne through betwixt them without great danger.

He that commeth out off Falmouth, and is bound to the weſtwards, muſt not goe more ſoutherly with an ebbe the ſouthſoutheaſt, or ſoutheaſt and by ſouth according as the winde ſhall be, for to runne cleare of theſe foreſayd.

Of the tydes and courſes of the ſtreams.

In the channell of Winchelſy a ſouth and by eaſt moone.
At Beachy by the ſhoare a S. S. E. and N.N.W. Moone.
In the fareway thwart of it, a ſouth and north moone.
From Beachy to the Neſſe E.N.E. and W.S.W.
At Beachy by the ſhoare before the ſeven Cleeves, the flood falleth eaſt by ſouth, and de ebbe W. and by N.
From Wight to Beachy E. and by N. and W. and by ſouth, thwart of Wight, before Dunnoſe, a ſouth and by eaſt moone maketh full ſea.
At S. Ellens and the Cowes a S.S.E. moone.
At Hampton at the kay, a S. and N. moone,
Within the Needles of Wight a ſoutheaſt and by ſouth moone.
Before the haven off Poole a ſouthweſt and northweſt moon maketh high water: alſo a ſouth and by weſt moone.
Thwart of Portland in the channell a S.S.E. and N.N.weſt moone.
From Portland to Wight, the flood falleth eaſt and by N. and the ebbe weſt and by ſouth.
In Darthmouth and Torbay a weſt and by ſouth moon maketh full ſea.
Thwart of the Steart in the channel, a weſtnorthW. & eaſtſoutheaſt moone.
From the Steart to Portland in the middeſt of the channell, the flood falleth eaſtnortheaſt, and the ebbe weſtſouthweſt.
Thwart off Dartmouth by the land, the flood falleth N. E. and by north, and the ebbe ſouthweſt and by ſouth.
Thwart of Torbay towards Exmouth in the baye, the flood falleth northnortheaſt, and the ebbe ſouthſouthweſt.
In Plymmouth and Foy a weſt and by ſouth, and eaſt and by north moon maketh the higheſt water.
Thwart of Foy in the Channell an eaſtſoutheaſt moone.
A ſea-board of Falmouth an eaſt and by ſouth, but in the haven of Falmouth an eaſt and by north moone.
At Helford and at the Lizart, by the land, an eaſtſoutheaſt and weſtnorthweſt moone maketh the higheſt water.
From the Rame-head to the Steart by the land, within the Eddy-ſtone, the flood falleth eaſtſoutheaſt, and the ebbe weſtnorthweſt.
From the Dodman to Rame-head, the flood falleth eaſtnortheaſt, and the ebbe weſtſouthweſt.
From the Lizart to the Dodman, northeaſt and ſouthweſt.
In the channell betwixt the Lizart and the Steart, thwart off Foy, the flood falleth eaſt and by north, and the ebbe weſt and by ſouth.

Of the Depths.

Betwixt Winchelſey and Piccardy in the middeſt off the channel it is deepe 26 and 27 fathom, upon ſuch depth men may ſee Fayerley and the land of Dover.

Without Beachy thwart of the ſeven Cleeves it is deepe 28 and 30 fathom.

In the offing thwart of Wight it is deepe 38 fathom, in ſuch depth men may ſee the land.

In the channell betwixt Portland and the Caskets it is 40 fathom deepe, when it is cleare weather, men may ſee the land on both ſides: the nearer England the ſhowlder towards the Caskets it is deepeſt.

The Steart and the land of Dartmouth men may ſee them both in five and forty fathom.

When you have the high land of Plymmouth north from you, you may ſee it in fifty fathom, it is high double land, and ſheweth it ſelfe firſt in two hilles. That ſame high double land within the land, you may ſee it from thwart of Foy until you come thwart of Dartmouth.

The Dodman you may ſee in 42 fathom off from the Lizart to the Steart.

The Lizart you may ſee in five and fifty fathom, there the ground is white and red ſhelly ſand.

Courſes and Diſtances.

From Fairlee to Beachy W. S. W.	5 leagues
From Beachy to the Owers VV. and by S.	13 leagues
From thwart of the Owers in 12 fathom unto Dunnoſe the ſouth poynt of VVight VV. S. VV.	5 leagues
From Beachy to Blackneſſe eaſt	20 leagues
From Beachy to Struyſaert ſouth	24 leagues
From Beachy to the Gaskets S. VV. and by weſt	27 leagues
From Dunnoſe to the ſouthermoſt poynt of VVight, unto the Needles of VVight, VV. and by N. and VV. N. VV.	4 leagues
From the weſt end, or the Needles of VVight, to the point of S. Albons land weſt	4 leagues.
From the Needles of VVight to Portland weſt and by ſouth and weſtſouthweſt	11 leagues
From VVight to Deep E.S.E.	37 leagues
From the eaſt end of VVight to Struyſaert S. E. ſomewhat ſoutherly	29 leag.
From VVight to the Caskets, ſouthweſt and by ſouth	20 leagues
From Portland to Seynhead ſoutheaſt and by eaſt	37 or 38 leagues
From Portland to the Caskets ſouth and by eaſt	13 leagues
From Portland to S. Paul de Lion ſouthweſt and by ſouth	40 leagues
From Portland to Uſhant ſouthweſt	35 leagues
From Portland to Exmouth weſtnorthweſt	13 leagues
From Torbay to Dartmouth S. VV.	2 leagues
From Dartmouth to the Steart S. W.	3 leagues
From Portland to Torbay weſt, ſomewhat ſoutherly	13 or 15 leagues

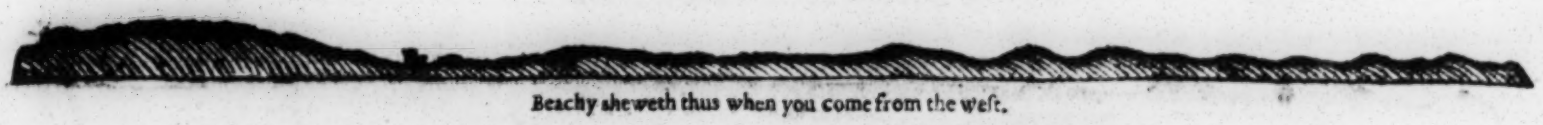
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From Portland to Dartmouth weſt and by S.	16 leagues
From Portland to the Steart weſtſouthweſt weſterly	18 leagues
From the Steart to the Caskets eaſtſoutheaſt	19 leagues
From the Steart to the Sept Iſles, ſouth and by eaſt eaſterly	24 leagues
From the Steart to S. Paul de Lion ſouth and by weſt,	29 leagues
From the Steart to Ushant ſouthweſt and by weſt.	40 leagues
From the Steart to Ramehead, the courſe is weſtnorthweſt	8 leagues
From Ramehead to the Iland off Iowe w. ſ. w.	5 leagues
From the Ile of Low to Foy, weſt	2 leagues
From Foy to the Dodman S. W.	4 leagues
From the Dodman to Falmouth VV. and by S, and VV. S. VV.	4 leagues
From Falmouth to the Lizart S. and by VV.	4 leagues
From the Steart to the Eddy-ſtone VV. or a litle more northerly 7 or 8 leagues	
From the Eddyſtone to the Ramehead N. a litle weſterly	3 leagues
From the Ramehead to the Dodman w. ſ. w.	8 leagues
From the Dodman to the Lizart ſ. w.	7 leagues
From the Steart to the Lizart w. and by ſouth	20 or 21 leagues
From the Lizart to Garnſey E. and by S.	37 leagues
From the Lizart to the Sept Iſles, or ſeven Ilands, the courſe is S. E. and by E. 27 leagues.	
From the Lizart to Ushant S.	29 leagues
From the Lizart to C. de Finiſterre ſ. ſ. w.	253 leagues
And that courſe goeth about 5 leagues without the cape.	
From the Lizart to Teneriſſe ſ. ſ. w.	466 leagues
From the Lizart to Tercera ſ. w. and by w.	386 leagues

Heights.

Dunnoſe to the ſouthermoſt point of VVight lyeth in	50 degrees 36 minuten
Portland lyeth in	50 degrees 30 minuten
The Steart lyeth in	50 degrees 12 minuten
or as ſome will hold, more northerly	
Torbay lyeth in	50 degrees 25 minuten
The Lizart lyeth in	50 degrees

How theſe Lands doe ſhew themſelves at Sea.



Beachy sheweth thus when you come from the weſt.



Thus sheweth Beachy with the ſeven Cleeves, when you come from the w. and ſayle alongſt by it.



Thus sheweth the Iland VVight, when you ſayle alongſt by it, being 3 or foure leagues a ſeabeard the land.

Portland.



Thus sheweth S. Albons Land, with Portland, to the weſtwards of it, when you ſayle alongſt by it, being to the eaſtwards of Portland.



Thus sheweth Portland when you come from the weſtwards.



Thus sheweth Portland, when it is north and by weſt from you ſixe leagues of.



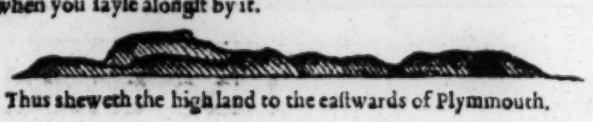
Thus sheweth Portland, when you come from the eaſtwards.



Thus sheweth the land to the weſtwards of Portland, when you ſayle alongſt by it.



The land betwixt Torbay and the Steart sheweth thus.



Thus sheweth the high land to the eaſtwards of Plymmouth.

The Steart Dartmouth Torbay.



Thus sheweth the land betwixt Torbay and the Steart, when the Steart is ſouthweſt and by weſt from you.

The Steart Dartmouth Torbay.



Thus sheweth the land betwixt Torbay and the Steart, when the Steart is VV. S. VV. from you.

Torbay Torbay Torbay Torbay.



The poynt of Torbay sheweth thus in divers forms, according as you are ſoutherly or northerly off from it.

The Steart Dartmouth.



Theſe two figures belong one to the other at the two croſſes.

Torbay. Apſum.



Thus sheweth Dartmouth, as it is portraved in theſe two figures, when you are right thwart from it a league or two from the land, with the land on both ſides of it, as well towards the Steart as towards Torbay, and to the northwards of it.

The Steart



Thus sheweth the Steart, being north from you 2 or 3 leagues.



The Steart being north from you 7 leagues, sheweth thus

This open will be shut too when you ſaile to the weſtwards.

This open wil be shut too when you ſayle to the weſtwards.

The ſteart.



When the Steart is northeaſt from you, it appeareth in this forme, and then the poynt goeth far downe.

Thus

Salckom. The Steart.



Thus sheweth the land to the weſtwards of the eaſtermoſt poynt of the Steart, towards Salckom, when you ſayle alongſt by it.

Plymmouth northnorthweſt. The Steart northnortheaſt.



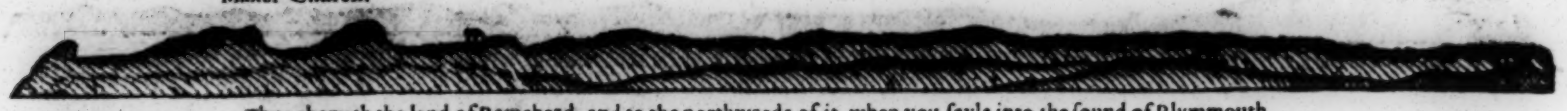
Thus sheweth the Land of the Steart, and alongſt to the weſtwards of Plymmouth, when the Steart is northnortheaſt about 2 leagues, and the ſound of Plymmouth northnorthweſt 5 or 6 leagues from you.

Mewſtone. The Steart.



The land betwixt the Steart and the ſound of Plymmouth sheweth it ſelfe in this forme, when you ſayle alongſt by it.

Maker Church.



Thus sheweth the land of Ramehead, and to the northwards of it, when you ſayle into the ſound of Plymmouth.

The Dodman. Ramehead.



When you are thwart of the Dodman 4 leagues without the land, that and the land to the eaſtwards of it, unto the Ramehead, sheweth it ſelfe in this manner.

The Dodman when you are right before it.



Thus sheweth the land to the eaſtwards of Falmouth, when you ſayle alongſt by it a league a ſeaboard the land.

Lizart. Falmouth. Dodman.



Thus sheweth the land betweene the Dodman and the Lizart.



Thus sheweth the Lizart when you ſayle alongſt by it.

Lizart. Helford. Falmouth.



The land betwixt Falmouth and the Lizart sheweth thus when you are before Falmouth.

The third Demonſtration,

Wherein are declinated the coaſtes off England, from the Lizart, and Englands end, to the C. off Cornwall, the Sorlings, and the chanell off Briſtow.

The Lizart

THE Lizart is a low poynt, where ſome rocks lye off from it, upon the S. end ſtandeth a Tower, and upon the high land towards the N. end ſtandeth another tower which is ſharpe.

Mounts-bay.

About five leagues northweſt from the Lizart, lyeth a great Baye, called Mounts-Bay, at the weſt point of that Bay lyeth a little Iland, whereupon ſtand two little ſhore towers like beacons, at the eaſt ſide in the bay lyeth another high little Iland, whereupon ſtandeth a Caſtle, called S. Michaels Mount. At the eaſt ſide of this Baye, lyeth a great rane of rocks, which lye off into ſea a league from the land, whereof men muſt take good heed in dark wheather, from thence to the ſouthward towards the Lizart, the coaſt is all alongſt full of rocks, but theſe lye not ſo farre off from the ſhore.

S. Michaels Monet.

For to ſayle into Mounts-Bay, comming from the Lands end, or from the Lizart, and being to the weſtwards of the foreſayd rane of rocks, you muſt runne in right with the little Iland called S. Michaels Mount, ſo long untill you come within a halfe league of it, then edge up to the weſtwards towards the Bay, untill that you ſee that foreſayd little Iland, with the two little ſhort towards at the weſt poynt, leave it on the larboard ſide, and runne in cloſe alongſt to the northwards of it, for it is very cleane, but leave the caſtle a great wayes on the ſtarboard ſide, being foule about. Being come within the little Iland at the weſt poynt, you ſhall ſee within it a great ſandy baye, anckor there in ſeven or eight fathom. Eaſtſouth-eaſt and ſoutheaſt winds doe blow there right open in, for all other winds you lye there landlockt.

Landsend, off England.

Foure leagues to the weſtwards of Mounts-Baye lyeth the Lands-end of England, and lyeth from the Lizart weſtnorth-weſt diſtant nine or ten leagues. About a leagues S. E. from the Lands-end and a halfe league without the land lyeth a ſuncken rock, which at low water commeth even above water. Thwart of that rock ſtandeth a Church upon the land, when you can but even ſee that over the high land, then are you thwart of the foreſayd rock, to wit, even as farre from the land as the rock, but when the church is hidden behinde the high land, that you cannot ſee it, then are you nearer to the land then the rock, or within the rock towards the land, and ſo you ſhall goe through betwixt it and the land.

Upon the Lands-end of England lye two round hillis, when you get ſight of them you ſhall ſee upon the higheſt a ſpire tower, comming ſomewhat nearer, you ſhall ſee upon the outtermoſt end, in the low land, another ſpire tower, thereby is the Lands-end reaſonable well to be knowne. The ground is thereabouts whitiſh ſand, with red ſand, and mingled with ſhelles.

From the Lands-end unto the C. of Cornewall, or to the little Iland Breſam, lyeth the coaſt moſt N. about 5 leagues.

At the Lands-end lye ſome rocks, you may runne in within them as well to the northwards as to the ſouthwards, and come to anckor in eight or nine fathom: to come in there from the ſouthwards it is narroweſt, and tenne fathom deepe: from the northwards it is beſt and broadeſt, and eight and nine fathom deepe; buth on the left ſide cloſe to the north poynt of the Lands-end lyeth a ſuncken rock, which you muſt avoyd when you ſayle in there. Rocks off the lands end.

Silly lyeth from the Lands-end weſtſouthweſt diſtant 8 leagues, but from the Lizart weſt 16 or 17 leagues.

Betweene the Lands-end and Silly lye the Seven-ſtones W. S. W. and W. and by ſouth foure leagues from the Lands-end, and N. E. and by eaſt, and eaſtnortheaſt, almoſt 3 leagues from Silly, that is, a rane of rocks which come not above water, but allwayes breaketh upon them. Seven ſtones.

Southſouthweſt and ſouthweſt and ſouth, 3 or 4 leagues from the Lands-end, and 5 leagues eaſt from Silly, lyeth alſo a ſharpe rook, called the Gulfe, which commeth at halfe tyde above water, and is round about indifferent cleane. The Gulfe

Silly is divided into divers Ilands, alongſt the weſt ſide lyeth

For to ſayl into Silly.

lyeth a great multitude of rocks, men may goe in there through divers channels or ſounds, but the ſouther channell is the beſt. About the middeſt of the entry of that ſound or channell, lyeth a ſuncken rock, men may goe in on both ſides off it, but to the eaſtwards off it is broadeſt and beſt. For to ſayle in there comming from the eaſt, you muſt runne alongſt by the eaſt land in eight or nine fathom, and you ſhall ſo runne alongſt to the eaſtwards of that foreſayd ſuncken rock, which lyeth againſt a ſconce a little without the caſtle. The markes to avoyd this Rock, are two rocks which lye on the weſt ſide within the haven, the one (to wit the innermoſt) is ſomewhat greater then the other. If you bring them one in the other, or the northermoſt a little to the eaſtwards of the ſouthermoſt or the ſmalleſt, ſo that you may even ſee through between them, and ſayl ſo right in, keeping them ſo, you ſhall ſo ſayle farre enough to the eaſtwards of the rock. If you come from the ſouthwards or the weſtwards, and are bound into Silly, then runne towards the eaſt-land ſo long untill you bring the two foreſayd rocks within the haven, one in the other, or even through one another, ſayle then ſo in, and then you ſhall runne (as before is ſayd) cleare of the foreſayd ſuncken rock, thwart of the ſconce. At the inner poynt of the Iland, at the eaſt ſide of this ſouther channell, lyeth another ſuncken rock, whereof men muſt take heed. For to avoyd it, you muſt run ſo long to the northwards, upon the markes of the foreſayd two rocks, untill you may ſee the little Tower in the ſandy Bay, then goe to the eaſtwards, unto the Bay, and anckor there in eight or nine fathom. When you come neare Silly upon the ſouth ſide, you ſhall ſee a ſquare Tower in the ſandy bay or valley, and to the weſtwards many little Ilands and rocks. The ground of Silly is ſomewhat ſtony with ſome red ſhels.

Of the depths and many ſorts of grounds before and in the channel betweene Silly and Vſhant, and thereabouts.

Seames.

Southweſt and by ſouth from the Seaws ſeven leagues it is deep 72 fathom, the ground pale, white courſe ſand, like ſmall fretted litle ſtones, with litle peeces of queenes ſhels with gray flat litle ſtones, & white gliſtering needles, ſaile from thence n. & n. and by e. and then you ſhall fall well to paſſe with Uſhant.

About two leagues ſouthweſt from the Seams it is deep 52 fathom, the ground there is white, yellow rough, & ſomewhat longiſh ſand, with a little red ſmal ſhelly ſand, with many gray crompeld things, and ſome ſmall with gliſtering poynts of needles. If men did finde there 70, or 80 fathom, they would judge it to be good channel ground.

Seames.

Weſtſouthweſt from the Seames, ſo farre from the land, as men may but even ſee the Sheets from the poop, with cleare ſight, it is 54 fathom deep, the ground is red, yellow, white and black peeces, like parings of cheeſe, and a little courſe red ſand mingled with all.

Seames.

Weſt and by ſouth 8 or 9 leagues from the Seames is 65 fathom, the ground it white yellow, with a little red ſmall ſhelly ſand, with ſome peeces of ſhels and queens, not very great, with much white & yellow ſome thing long ſand, & ſmal white things like poynts of needles, like as men find in the channell.

Vshant.

Seven leagues ſouthweſt from Uſhant, or thereabouts, that men may even ſee it from the poop, having cleare ſight in 70 fathom, there the ground is white and yellow courſe ſand, with ſome peeces of queenes ſhelles, and ſome peeces of white thin ſhels, with ſome gray flat ragged ſtones.

Vshant.

Southweſt and by weſt from Uſhant, about 19 or 20 leagues in 78, or 80, fathom, the ground is white and yellow courſe ſand, with ſmall gliſtering needles, with white peeces off queens shels, and gray and yellow flat ſtones, and litle peeces, like as it wers of Oyſter ſhels.

Vshant.

Weſt and by ſouth from Uſhant 21 leagues, in 68 fathom, the ground is red, yellow, and black, mingled with a little white round ſmal ſand, like ſhelly ſand. But in 80 fathom, 24 leagues weſt and by ſouth off from Uſhant, the ground is yellow and ſhelly, with ſome gray and crompeld little needles like ends of ſmal rye.

Vshant.

In eighty fathom 24 leagues from Uſhant weſt and by ſouth, men finde rough great ſand, with many ſorts of ſhels, red, white, yellow, and gray, with peeces of queene ſhels.

From Uſhant weſt 16 or 17 leagues, in 75 fathom, the ground is white and yellow courſe ſand, with peeces of thinne white ſhelles, & gray peeces of queenes ſhelles, like as it were of Oyſter ſhels, white ſmal white gliſtering things like needles.

Vshant.

Eight or nine leagues from Vshant it is deepe 70 fathom, the ground red, white, yellow, and gray ſhelly ſand, with red, yellow, and black peeces off ſhelles, & ſmal red, yellow, black, and gray ſtones, with ſome ſmal white things like needles.

Eight and forty leagues weſt and by north from Uſhant and 50 fathom weſtſouthweſt from the Lizart or thereabouts, it is deepe 95 fathom, the ground red, yellow, and black ſand, with ſmal white round ſhelly ſand, and ſome little peeces of ſhelles, and queen ſhels, with ſome peeces of thin ſhels.

Three and thirty leagues weſt & by north from Uſhant and 27 leagues ſouthweſt and by ſouth from Silly, in 95 fathom, the ground is gray, red and yellow, mingled with ſmal blanck ſands, with darke, red, white, and yellow peeces off ſhels, to wit, gray and red ſhelly ſand. An eaſtnortheaſt courſe from this ground off, is the beſt, it is in the height of about 49 degrees.

Foure and twenty leagues weſt, or weſt and by north from Uſhant, and ſouth and by weſt from Silly 21 leagues in 80 fathom, there the ground is white, gray, red and yellow fine ſmal ſhelly ſand, with little red and white peeces of little ſhels, to ſee to like bruiſed muſtard ſeed in the height of 49 degrees. Ushant.

Seven or eight leagues weſt and weſt and by north from Vshant in 68, or 70 fathom, there the ground is white and yellow, ſmal shelly ſand, mingled with many gray crompeld little things, like needles. Ushant.

About 30 leagues ſomewhat more northerly from Vshant, in 90 fathom, the ground is ſmal white rough, and ſomewhat long ſand, mingled with an red and yellow, and ſome gliſtering little things like needles, with two or three peeces of white gray shels. If you goe on from thence northeaſt and by north, untill you come in 55 fathom, there the ground is yellowish, white courſe shelly ſand, with white peeces off shels, then you may ſee Silly lye nine or tenne leagues north or ſomewhat more weſterly from you. Ushant.

Weſtnorthweſt from Vshant 21 leagues, and ſouthweſt and by ſouth from the Lizart 27 leagues, in 80 fathom, the ground is gray and red shelly ſand, there commeth alſo on the lead a little peece or two of white or gray queene shels, with yellow and red peeces of shellow, alſo peeces off perriwinckles. Ushant. Lizart.

Nine leagues northweſt and by north from Vshant, the ground is white and yellow rough shelly ſand, with gray crompeld gliſtering little things like needles, there come alſo on the lead little things like ſmal ſtraws. If you goe on northeaſt from thence, you shal fal with the Steart. Ushant.

Twenty leagues northweſt and by north from Vshant, and 16 leagues ſouthweſt ſomewhat ſoutherly from the Lizart in 68 fathom, the ground is white yellow and red ſmal round ſand, with ſome white gliſtering little things like needles, with one or two little gray crompeld things like needles, and 2 or 3 little peeces of little white shels.

Nineteen leagues N.N.W. from Vshant, & 12 or 13 leag. S. S. W. from the Lizart, it is 68 fathom deepe, the ground is there al manner of ragged ſtones, gray, red and black with red peeces of shels, & ſom gray crompeld litle things like needles. Ushant. Lizart.

Nineteene leagues north and by weſt from Vshant, the S. from the Lizart, it is deepe ſixty two fathom, the ground is white and courſe shelly ſand, with white and gray crompeld little things, like needles, with white peeces of shels, and 2 or 3 little ſtones amongſt. Ushant.

Twelve or thirteene leagues weſt from Silly, or ſomewhat more northerly, it is deep ſixty fathom, the ground is gray & oaſie, mingled with ſmal black ſand. In ſome place of the ſame depth it is white gray, oaſie ſmal ſand, with peeces off thin white shels amongſt, with a little peece or two like parings of cheeſe: this ground cannot be gotten up with candle tallow, or other hard tallow upon the lead, but with ſoft tallow, or butter. In theſe depths you have no where ſuch oaſie ground as there, whereby men may well know that they are on the back ſide of Silly or England, to wit, weſt from Silly. Silly.

Weſt from Silly 7 leagues, it is oaſie gray ſand with 2 or 3 little peeces like parings of cheeſe. Silly.

Seven or eight leagues ſouthſouthweſt from the Lizart, in ſixty fathom, the ground is white groſſe with a litle red ſand, with little shels, & little gliſtering white things like needles.

Nine or ten leagues ſouth and by weſt from the Lizart, in 60 fathom, the ground is yellow pieces of shels, and gray pieces of ſoft flat ſtones like parings of cheeſe, with ſome red pieces of shels, without any ſand therein.

Southweſt and by weſt from the Lizart, and S. S. W. from Silly 19 leagues it is deep 78 fathom, the ground gray, yellow, and red shelly ſand, with red, yellow, and blue pieces of ſhels with queene shels, and a piece or two like parings of cheeſe, or like pieces of Oyſter shels, with alſo two or three gliſtering little things like needles, in the height of about 49 degrees, and 30 minutes. Lizart. Silly.

Fifteen or 16 leagues S. W. and by ſouth from the Steart, in 57 or 58 fathom, the ground is pieces of all maner of shels, and queen shels, with a little yellow and white shelly ſand, with many ſorts of little ſtones, and gray little pieces like parings. Steart.

rings of cheese, with some crumpeld, and some not crumpeld, but little glistering things like needles, and little things like maggots that are in Bakon.

Steart. Southsouthwest from the Steart, 16 leagues, in 53 fathom, the ground is white reddish shelly sand, with pieces of queene shels, with red gray little stones.

Southwest from the Steart 8 leagues, it is deep 40 fathom the ground gray and red shelly sand.

Southsouthwest from the Steart, 13, or 14 leagues, it is deep 47 fathom, the ground pale muddy sand, with little long things, and little stones.

A great kenning S.S.E. from the Steart, it is deep 40 fathom, the ground red sandy clay with pits in the tallow.

Steart. Southwest eleven or thirteen leagues from the Steart, in fifty fathom, the ground is white and yellow small shelley sand, with some pieces of white shels, with gray and crumpled, and also glistering litle things like needles. In fine, he that soundeth much, getteth many and divers sorts of grounds and sometimes great change in little change of distance of place. But he that soundeth and findeth white shels, with little things like strawes and needles, it is certaine that he is nearest to Ushant: but if he finde brandy ground, or blacke little stones mingled with white little things, then is he nearest to Silley.

Markes of Vshant & Silly. Hee that soundeth thwart of Ushant, and findeth small white sand, and little shels, and small little things oasie and white. Ushant shall then lye N. E. from him. If he finde long small little things like needles, then shall Ushant lye S.E. from him. But if he be not sure of these grounds, then he shall beare to the northwards. And if he finde deeper water then he is towards the Seams, but if hee finde it showldy, then he is in the entring of the Channell to the northwards of Ushant. If he be between Ushant and the Seams in 70 fathom, he shall finde the ground to be small little stones like black sand of the earth: or else if he finde the ground to be great red sand, then he must stand to the northwards, untill that he finde the white sandy ground, and long small things then he may hold himself certaine to be in the entring of the channell.

From the Lands-end of England to the C. of Cornwall, the coast lieth north about 5 leagues, but Silly and the foresaid Cape lie southwest and northeast distant about 9 leagues. By
S. Bresam. the Cape lieth a little Iland or Rock, called Bresam, betwixt it and the Cape men may sayle through.

From the Cape of Cornwall unto the little Towne Saint
S. Yves. Yves, lieth the coast about east and by north, and E.N.E. five or sixe leagues. Saint Yves lieth upon the west poynt of a great Bay, which is about two leagues broad. At the east poynt of the Bay lieth a little Iland, there lieth off from it a great ledge of rocks, a great halfe league thwart off into sea, whereof many of them come at halfe ebbe above water, therefore he that commeth off from the Cape of Cornwall, & will sayle alongst the coast towards Stoupert or Padstow, must keepe off (thwart of this ledge) at least a great league from the shoare, because of the foresaid rockes. Betwixt that foresaid little Iland at the east point of the Bay and the maine land, it is also at many places rocky and soule, so that one that is not there very well acquainted, may not sayle through there without great danger. In the Bay of S. Yves is on both sides good sandy ground, where men may anckor all over, and come so neare the shoares as they will. At the West side of the Bay at the Towne, is a head where small shippes and Barkes doe goe in within it, and lye there succoured for northerly windes, but great ships may not doe so, they must anckor without in six or seven fathom.

From S. Yves to Hartland poynt, the course is northeast 17, or 18, leagues, betwixt them both about halfe wayes lyeth the poynt of Stoupert, to the eastwards of it lyeth Padstow
Stroupert. Padstow. in a Bay, where is a very good road in 7, or 8, fathom. At the west side of that poynt lyeth a suncken Rock under water, and upon the poynt a great high rock, to the westwards of that poynt towards S. Yves, are many white sandy and chalky bayes alongst the shoare, thereby the coast there is very good to be knowne.

Hartland poynt. Hartland poynt is a poynt that lyeth out, 4 leagues north from it lyeth the Iland Londey, which is somewhat a long Iland, it lyeth most north and by W. and S. and by E. At the east side of that Iland men may ride for westerly windes in 14 and 15 fathom, but on the west side the ground is foule.

Biddeford Foure leagues to the eastwards of Hartland poynt eastsoutheast from the south end of Londey, lyeth the sound of Biddeford, being a broad haven, where many shippes doe sayle in and out. A little within the mouth of the haven, it divideth it selfe into two rivers, upon the westermost on the starboard side lyeth Biddeford, and upon the easter-most on the larboard side lieth a town called Barnestable. Barnstable

From the poynt to the northwards of Biddeford Haven, unto Ilfercombe the course is E.N.E. foure leagues, that is a haven where remaineth at low water 3 or 4 fathom depth. Before the haven is also good road, in 8 or 9 fathom at halfe flood.

Eleven or 12 leagues to the eastwards of Ilfercombe, lie two little Ilands, about two leagues north and south one from the other, called the Holmes, the northermost is called the Flathom, and the southermost the Stepholm, betwixt Ilfercomb and the Holms (somewhat nearer the Holms then Ilfercomb, lieth a little towne called Mynehead, where many ships do lade. Ilfercomb. Flatholme Steepholm.

In the fareway betwixt Ilfercomb and the Holmes, on the English side; on the one side, and the bankes on the Welsh side on the other side, in the middest of the channell it is deepe 30, 25, 20, 18, 16, and 15 fathom, the nearer the Holmes the showldier water. When men come from the westwards within the Iland Londey, then they may see the Land on both sides, to wit, of England and Wales. The English coast even from the C. of Cornwall to the Holmes is altogether cleane, but the coast of Wales is most all foule and showldy, from the Iland Caldy unto Bristow, with many bankes, sands, and riffes that lye off. The Holmes and the Iland Londy lye west southwest, and east northeast, distant 19 leagues.

He that will sayle from Londey to Bristow, must run alongst by the English coast, untill that he come within the poynt of the Naes, for to avoyd Naes-sand, and then forth alongst through betweene the Holmes, leaving the Steep-holme on starboard, and Flatholme on the larboard side. Men may also with little ships, of little draughts, sayle about to the S. wards of the Steepholme, but it is there so showldy, that there remaineth at low water no more then 2 fathom water. Under Steepholm men may anckor where they will, in 4 or 5 fathom. Road under Steepholm.

He that commeth off from the Naes, and is bound to Bristow, must stand over to the Steepholme, and run alongst to the n. wards of it. It lyeth from the Naes e.s.e. about 7 leagues.

For to saile through between the Holms, the right and best fareway, you must sayle nearest the side of the Flatholme, there it is deepest, with an open wind men may sayle alongst so neare by it without any hurt, that they may cast with a stone upon it. Within, or to the eastwards of the Holmes, lyeth shooting off from the eastland, a great showld, lying off with a great tayle towards the west, which (comming from the west) men might easily sayle within. For to avoyd it, you must set the Flatholme (when you are passed it) southwest from you, and keepe it standing so, untill that you shall have sayled about a great league, looke out then for a little Iland, that shall then at the east shore lye neere about thwart from you, upon it standeth two mils, and above upon the maine land standeth one mill. When the mill that standeth upon the high land commeth to the west end of that foresayd Iland, you shall bee past the foresayd taile off the English grounds, and cannot sayle within it, goe then eastnortheast alongst by the English grounds, which are flat, so that you may sayle alongst by them upon your lead in 3 or 4 fathom so neere as you will. When then the mill that standeth upon the high land, commeth betweene the foresayd two mills which stand upon the litle Iland, then shal you be altogether past the English grounds, run then boldly towardes the English coast, and so close alongst by it, as you please, towardes Passis or Portshut poynt. From the Flatholm to Passis poynt in the right fareway, it is deep 14 and 15 fathom. The Welsh side you must shun, and take very good heed of it, because it is very uneven and full of steep bankes that are needle to, which at many places do fall dry at low water, you may not come neerer that coast then in 12 fathom, for (sayling towards it) you shall have at one cast ten fathom, & before you can have the lead againe, you shall sit fast, alongst from Flatholm till you come to Bristow. About Passis poynt men do anckor in Kings road which is between the poynt and the river of Bristow, neerest the river there is good clay ground in 8, or 9, fathom. They that are bound into the river are brought in by the Pilotes. Men may from thence also sayle in alongst by the coast to the River of Severne, which is also like the River of Bristow, a faire river to sayle into. For to saile through between the Holms. Markes of the English ground. Kings road.

For to sayle from Bristow to Londey, you must goe away from Passis point westsouthwest untill that the Flatholm doe come to beare southwest from you, or els until that the three foresayd mils upon the south land doe stand a like farre one from the other, to wit, that which standeth upon the high land, doe stand in the middest betweene the other two, sayle then right with the Flatholme, and very close alongst to the southwardes of it, and being passed it, goe then forth westsouthwest unto the Iland Londey.

About

Cardief. About 3 leagues to the northwardes off Flatholm lyeth the Town Cardieff in Wales, being a tyde-haven, before it is a good road, as well for ſhippes that are bound to the weſtwardes as to the eaſtwards, where men may lye landlockt allmoſt for all windes, to the eaſtwardes and to the northwards of it lye many ſands and bankes, which fall drye at lowe water, and ſo that they make men landlockt for northeaſt and eaſt winds. Hee that is bound into the roade before Cardief comming from the weſt, muſt runne in betwixt Flatholm and the poynt off Cardief, lying ſomewhat to the ſouthwardes of Cardief, and being come about the poynt, then to the northwardes up alongſt by the ſhore unto the road.

Silye. Barrey. Cloſe up to the poynt of Cardief, to wit, to the weſtwards of it, lye two little Ilands, the one next to the point, is called Silye, and the weſtermoſt Barrey: betwixt Silye and Flatholme lyeth a rock, ſoutheaſt and ſoutheaſt and by eaſt from the point, which muſt bee avoyded when you wil ſayle through there unto the roade of Cardieff. Whē it is high water you may ſayle over all that which at half ebbe cometh not above water.

The Naes. About five leagues weſt from the poynt of Cardief lyeth the Naes, to the weſtwardes off it the land falleth away firſt about northweſt, then afterwards ſouthweſt, or ſouthweſt and by weſt, and ſo maketh a great bay betwixt the Naes and Wormes head, where there are very good roads for weſt, north, northeaſt, and eaſt winds.

Naeſſand. From the Naes a little from the ſhore lyeth a great banke called Naeſſand, which lyeth off from thence weſt and by ſouth, and weſtſouthweſt at leaſt five leagues into ſea. From Wormſhead likewiſe lyeth off a banck which is very ſteep, called Helwix, about foure leagues ſouthſouthweſt, and ſouthweſt and by ſouth into ſea, they that come from the eaſtwards, and will goe to ryde in the Bay betwixt the Naes and Wormeſhead, runne alongſt cloſe by the poynt of the Naes, through betwixt the Naes and Naeſſand, likewiſe they that come from the weſtwardes, and are bound in there, may run through cloſe alongſt by the poynt of Worme head and the Helwix, it is betwixt them both about an Engliſh mile broad. He that cometh out of the ſea, may come in betweene the foreſayd ſandes or banckes, it is there wide and broad.

Helwix.

Wormes-head. Wormſhead is a poynt lying farre out, to look to a farre off allmoſt like the Oldhead in Ireland, but it is above or under, & goeth ſloping downe towardes the north, it hath many white chalky ſpots, whereby it is very good to bee known.

Caldy. About foure leagues to the weſtwardes of Wormeſhead lyeth the little Iland Caldy, where upon ſtandeth a white Tower, ſhewing off at ſea like a white ſayle, which is ſet there for to know the land by.

Betwixt this Iland and the poynt off Wormſhead, the land falleth a way with a great bay to the northwardes, unto Carmarthen and Tinbuy, in this Bay it is all over good anckor ground for to ride. On every ſide of the Iland Caldy men may alſo anckor, and have ſhelter for all windes. A little to the northwardes of Caldy lyeth a rane of ſuncken rockes, called the Wullox. Hee that will ſayle about to the eaſtwardes off the Iland, to Tinbuy, may runne cloſe about by it, up to the weſtwards, through betwixt the Iland and the ſuncken rockes, leaving them on the ſtarboard ſide, or elſe hee may runne alongſt alſo to the eaſtwardes and to the northwards of the ſuncken rockes leaving them on the larboard ſide, and ſo then alſo to Tinbuy, and anckor there before the Towne in five or ſixe fathom. To the eaſtwardes and to the northwardes off the foreſayd rockes, it is alſo good anckoring in ſixe, ſeven, or eight fathom, it is there all cleane ground, and farre of ſhowld water. Men may alſo ſayle through to the weſtwardes of the Iland Caldy, (which is between the Iland and the poynt of the maine land) to Tinby, but it is there narrow, yet cleane, and deepe enough.

Wullox.

River off Carmarthen. The River of Carmarthen lyeth from the Iland Caldy northeaſt and by north diſtant about foure leagues, the channell for to ſayle in there, lyeth in eaſtnortheaſt, on the eaſt or the ſouth ſide lyeth a great Banck which lyeth offarre from the ſhore, and on the off-ſide goeth off flat. For to ſayle in there men may ſound it in alongſt by the eaſt or north ſhore, untill they be over the ſhowldeſt of the barre, there is upon it at halfe flood about foureteen foot water, and being over the barre, it will be againe foure fathom deepe, or thereabouts, then they may run in forth alongſt by the ſouthſhore, by the lead, untill they come within the river.

S. Gawens poynt. Foure or five leagues to the weſtwards of the Iland Caldy, lyeth S. Gawens poynt, the ſouth poynt of Wales, by ſome called the white poynt. About halfe an Engliſh mile ſouthſouthweſt from the poynt, lieth a ſuncken rock, called the Crow, whereof men muſt take heede.

The crow.

Two leagues to the weſtwards of S. Gawens poynt lyeth the haven of Milford, a broad and wide ſound, lying in at the entry N. E. in, being come in within the poynts, men may goe up to the northwards, eaſtwards, and ſouthwards, unto divers places and roades. About by the north poynt, men may ſayle unto Daleroade, there it is good lying in three fathom and three fathom and a halfe at low water. When men come a litle within the ſouth poynt in the open of Milford haven, there lyeth a little Iland or rock like the Mewſtone by Plymmouth, being paſt that, a little they may run to the ſouthwards, into a bay, where they may lye landlockt for all windes.

Milford-haven.

Steeck-holm. Scaline. A little to the weſtwards of Milford-haven lye two little Ilands, the ſouthermoſt is the ſmalleſt, called Stockholm, and the northermoſt Scaline. About 2 leagues N. N. W. or N. W. and by north from thence, lyeth the Iland Ramſey, there betwixt them hath the land a great Bay, called the Broad-bay. Ramſey lyeth at the north point, and Scaline, at the ſouth poynt off the Bay, there in alongſt the ſhore is good riding for north, northeaſt, eaſt and ſoutheaſt winds, in 7, 8, and 9 fathom. Upon the North poynt of this Bay lyeth a litle Towne, called S. Davids, to the northwards of lyeth the Coaſt off Wales alongſt northeaſt unto Cardygan.

Ramſey. Broad. S. Davids

About two leagues weſt and by ſouth to ſeawards from the Iland Scaline, and 3 leagues ſouthwards from Ramſey, lyeth that little Iland Graſholm, which is a round cleane rock, and about 4 leagues of from it lye alſo two litle Ilands, which are fowle, called the Smalles. The lying of them, with the dangers thereof, you may reade in the deſcription off Ireland.

Grasholm. Smals.

On the northweſt ſide of the Iland Ramſey lyeth the Biſhoppe with his Clarks, theſe are rockes that lye off to the N. wards and ſouthweſtwards of that Iland a good way to ſea. About 5 leagues northW. or ſomewhat northerly from Ramſey lyeth another great rock, called Maſcus, which is all round about foul, with many ſuncken rocks. He that cometh to ſaile thereabouts, or to lye by, muſt take very good heed of them.

Biſhop with his Clarkes. Maſcus.

The Iland Ramſey, or the northpoint of Wales, and the ſoutheaſt poynt of Ireland, lye about eaſtſoutheaſt and weſtnorthweſt diſtant 16 leagues.

Of the tydes and courſes of the Streams.

In Mounts-Bay and at the Lands-end of England, a weſtſouthweſt and eaſtnortheaſt moon maketh high water.

In Silly a ſouthweſt and by weſt moone maketh ful ſea.

A ſeaboard of Silly in the channel likewiſe a ſouthweſt and by weſt Moone.

In the entring of the channell a ſouthweſt and northeaſt moone.

From Silly to the Lizart the flood falleth northeaſt, and the ebbe ſouthweſt.

Betwixt Silly and Londay the flood falleth northeaſt, and the ebbe S. W.

In Silly a ſouthweſt and by weſt moone maketh high water.

On the coaſt of England betwixt the Cape of Cornwal and Hartland poynt a weſtſouthweſt, and weſt and by ſouth moon maketh high water.

Thwart of the Iland Londey a weſt and by ſouth, but on the Iland an eaſt and weſt moone.

At the Iland Londey, and at the Holmes, an eaſt and weſt moone maketh high water.

At Briſtow within, a weſt and by north moone maketh ful ſea.

At Milford haven an eaſt and by north, and weſt and by ſouth moone maketh high water.

In the channel of Briſtow betwixt Londey and the Holmes, the flood falleth eaſtnortheaſt, and the ebbe weſtſouthweſt.

Within the Holms towards Briſtow, the flood falleth northeaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

Betwixt Londay and Midford, the ſtreame falleth northeaſt, and northeaſt and by eaſt.

Of the Depths.

Silly men may ſee on the ſouthſide in 52 fathom, and the ground there is ſtony, with ſome red ſhels.

The lands end of England, men may ſee alſo in 52 fathom.

Silly may be ſeene on the north-ſide in 45, 46, and 48 fathom, there the ground is oaſie, with ſome little ſtones amongſt it.

When men are to the northwards of Silly, it ſheweth firſt in two Ilands, upon the eaſterm-oſt they ſhall ſee a tower, or little caſtle to the eaſtwards of the two Ilands, they ſhall ſee alſo great two hilly rockes, and to the weſtwards three high black rockes.

Weſtnorthweſt and weſt and by north ten or eleven leagues from Silly, the ground is oaſie and ſoft that men can ſcarce get any of it upon the lead, there come ſome little ſhels amongſt it.

Betwixt the Lands end of England and Londey in the fareway, it is 45 fathom deepe, the land of Cornwall, men may ſee in 44 fathom.

Three or foure leagues without the land, thwart of Saint Yves, Stoupert, or Padſtow, the ground is ſharpe and rocky, but neerer the land it is all ſandy ground.

Betwixt S. Yves and Hartlands poynt are many white chalky hills alongſt the coaſt, eſpecially neere by Stoupert or Padſtow, whereby this coaſt it is to be knowne.

In the channell betwixt the Holmes and Briſtow, it is deep 12, 13, and 14 fathom, men may ſee the land on both ſides.

Upon the coaſt of Wales about Milford, and to the northwards of it, men may ſee the land in 42, and 45 fathom.

Courſes and Diſtances.

From the Lizart to the Lands end weſtnorthweſt,	——	9 or 10 leagues
From the Lands end to Silly w. ſ. w.	—— ——	8 leagues
From the Lizart to the Gulfe, the courſe is w. and by N.	——	10 leagues
From the Lands-end to the Gulfe the courſe is S. S. W.	——	3 leagues
From the Gulfe to Silly weſt	—— ——	5 leagues
From Silly to the Gaskets eaſt ſomewhat ſoutherly,	——	65 leagues

From Silly to Ushant, the courſe is ſouthealt and by ſouth, 37 leagues
From Silly to C. de Finiſterre, ſouth and by weſt weſterly 150 leagues
From Silly to C. Cleare in Ireland northweſt and by north, 40 leagues
From Silly to Waterfoord north, ſomewhat weſterly, —— 40 leagues
From Silly to the C. of Cornwall northeaſt —— —— 9 leagues
From the C. of Cornwall to S. Yves eaſt and by north, —— 7 leagues
From S. Yves to Stoupert poynt, northeaſt and by eaſt, —— 9 leagues
From Stoupert to Hartland poynt northeaſt and by north, —— 9 leagues
From S. Yves to Hartland poynt N. E. —— 18 leagues
From Hartland poynt to the Iland Londey north, —— 4 leagues
From the C. of Cornwall to Londay northeaſt and northeaſt and by north 27 leagues
From the C. of Cornwall or Milford in Wales northnortheaſt 32 or 33 leagues
From Silly to Milford northnortheaſt, ſomewhat eaſterly, —— 40 leagues
From the Cape of Cornwal to Waterford N. N. W. But from Silly north and by weſt, ſomewhat northerly —— 40 leagues
From Silly to C. Cleare in Ireland northweſt and by north, 40 leagues
From the weſt end of Londey, to Biddeford eaſtſoutheaſt —— 5 leagues
From Biddeford to Ilfercomb E. N. E. —— 4 leagues

From Londey to the Holmes E. N. E. —— 20 leagues
From the Steepholme to the river of Briſtow northeaſt and by eaſt. 12 leagues
From the Steepholme to the Naes weſtnorthweſt about —— 7 leagues
From the Naes to S. Gawens poynt weſt, ſomewhat northerly - 17 leagues
From S. Gawens poynt to Milford haven northweſt and by north 4 leagues
From the Iland Scalie to Ramſey northnorthweſt, —— 2 leagues
From Londay to Milford North and by weſt and northnorthweſt 12 or 13 leagues
From Milford to the Cape of Cornewall ſouthſouthweſt —— 32 leagues
From Milford to Silly ſouthſouthweſt, and ſouthweſt and by ſouth 40 leagues

Heights.

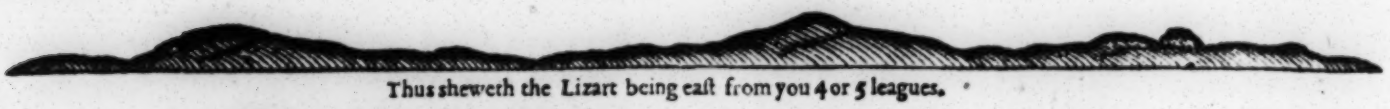
The ſouth ſide of Silly lyeth in —— 50 degrees, or a litle more
The Cape of Cornwal lyeth in —— 50 degrees 25 minuten
Londay lyeth in —— —— 51 degrees 20 minuten
The Holmes lye in —— —— 51 degrees 40 minuten
Milford in —— —— 51 degrees 50 minuten
The Iland Ramſey in —— —— 52 degrees

How theſe Lands doe ſhew themſelves at Sea.



Thus ſheweth the Lizart when it is 5 or 6 leagues eaſt and by north from you.

Mounts Bay. The Lizart.



Thus ſheweth the Lizart being eaſt from you 4 or 5 leagues.



Thus ſheweth the Land betwixt the Lizart and the Lands-end when the Lizart lyeth about eaſt and by north, and Mounts-bay north from you,

Lands end n. n. w. Mounts Bay n. e. by n. and n. n. e.



Thus ſheweth the Lands-end, and the land to the eaſtwards of it when it is northnorthweſt, and Mounts-bay is northeaſt and by north, and northnortheaſt from you, being a league from the land.



The Lands-end ſheweth it ſelfe thus, when you come in right within out of the ſea.



The lands-end being eaſt from you ſheweth thus.

East The Lands end of England.



Thus ſheweth the Lands-end when it lyeth ſoutheaſt and by ſouth ſeven or eight leagues from you, and the round Hill to the northwards of it eaſt, then you may even ſee the low land betwixt them both.



Thus ſheweth the Silly, being eaſtnortheaſt from you.



When Silly is ſoutheaſt from you, it ſheweth thus.



When Silly is eaſt 5 or 6 leagues from you, it ſheweth thus.



When Silly is ſoutheaſt and by eaſt from you, it ſheweth thus.



Silly, being ſouthweſt from you ſheweth thus.



Thus ſheweth the land betwixt the lands-end of England, and the C. of Cornwall, or the Iland Breſam, when you are on the black ſide of the Lands-end.



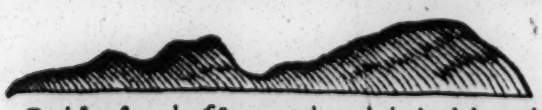
Thus ſheweth the C. of Cornwall, when it is eaſt and by ſouth from you, ſo farre that you may but even ſee it from the poop.



Thus ſheweth the land betwixt the C. of Cornwall, and S. Yves, when it is about 4 leagues from you.



Thus ſheweth the land, when you are before or thwart of S. Yves, about five leagues without the land.



To the weſtwards of Stoupert ſheweth the land thus, when you ſayle alongſt by it 2 or or 3 leagues without the land.



The land to the eaſtwards of Padſtow or Stoupert ſheweth thus, when it is 2 leagues eaſt and ſouth from you.



The land of Stoupert or Padſtow ſheweth thus, when you ſayle alongſt by it, 3 or 4 leagues without the land.



When the Iland Londay is north from you, it ſheweth thus.



When the Iland Londay is N. N. W. from you you, it ſheweth in this forme.

Thus

Les Costes Marine
d'Yrland entre
Waterford et Rangleens

Duytsche mylen 15 voor een graadt Lieues d'Allemag 15 een dagre
Spaensche mylen 17½ voor een graadt Lieues d'Espag 17½ een dagre
Enge en Fra mylen 20 voor een graadt Lieues Angl et Franc 20 en dagre

Duytsche mylen 15 voor een graadt Lieues d'Allem. 15 en een dagre
Spaensche mylen 17½ voor een graadt Lieues d'Espag 17½ een dagre
Eng en Fra. mylen 20 voor een graadt Lieue Ang. et Fra. 20 en dagre

WATERFORD

Waterfoordt

Rosse

Dungarvan Abby

Dungarvan

Bandon

Kinsale

Bannogh

Mallimburn

Ballatogh Castel

Salues

Kinsale

Kenbeg

Noordkaep

Blaverick

Tarbert

Fenit

Ballyheigh Castel

Drodagh

Dundalck

Carling foort

Newry

Narrowater

Oren Castel

Maide town

Armer van Carlingford

Shenes

Rochel

Limby

Wexford

Tusser

Strangfoort

De Riviere van Dimbrick

CALFERIA

32

De Cuſte van Yerlandt. Tuſſchen Waterfoordt en Dubling. Nieulyx beſchre: ven door Iacob A. Colom.

De Cuſte van Yerlandt van Lambey. Tot verby Rangbleens

Dubling

Klontarf

Ringſend

Suyckerbrandt

Dalkey

Bartmarcke

Howth

Lambey

Yerlandt

Hedenhoofd

Grombey

Ysselgats

Bray

Brackel

Dalkey

Schaeps eylt

Rangbleens

Foure forlyden

Ysley

Ile ſondt

Scharrehoeck

Belfaſt

Knocfergus

Clayſtick

Slaeb-land

Hoyghyck

C. Cantyr

Arren

Copland's ilas

Ploegh

Blaeu

Lougreau

Yrlandt

MUSEUM

The entrance of Ilfercoomb.



VVhite-houſe.

Thus sheweth Ilfercoomb, when you are right before the entry of it, cloſe by the Land.



Axbridge. Ilfrayecoomb.

Thus sheweth the Coaſt of England betwixt Ilfercoomb and the Holmes, when you ſayle alongſt by it.



The Naes. Cardief. Sillye.

Thus sheweth the land of Whales from Cardief to Wormeshead.



Thus sheweth the coaſt of VVales betwixt the Iland Caldy and Milford-haven, when the northermoſt is northnortheaſt, and the ſouthermoſt is eaſtſoutheaſt from you, and that you may but even ſee it from the poope.



The land betwixt Tinbuy and Milford sheweth it ſelfe thus, when you ſayle alongſt by the land, as is portrayed in the 2 figures, as the AA belongeth one to the other: the ſpire of the tower of Tinbuy is very white.

A Tinbuy. Caldy.





S. Davids-bay.

The land from Milford-point unto the point of S. Davids-head, sheweth, as is portrayed in theſe 2 figures.



From Mil-ford to Tinbuy, men ſayle alongſt by the coaſt, about 4 or 5 points, it is moſt plaine land, like ſand-hils. About two leagues to the weſtwards of the point of Tinbuy, ſtandeth a ſpirie tower, with 2 other ſmall flat little towers more, whereby the coaſt thereabouts is good to be knowne.

The fourth Demonſtration,

Wherein the Southeaſt and eaſt coaſt of Ireland is deſcribed betweene Waterford and Bandhaven or Rangleens together withe with the coaſtes of Schotland lying over againſt it.

The hill of Dongarvan.

FRom the Landes end of England to Waterford, the courſe is northnorthweſt with that courſe you ſhall fall right with Waterford. But from Silly to Waterford, the courſe is north and by weſt, ſomewhat northerly forty leagues: betwixt both it is all oaſie and ſoft ground. Nine or ten leagues in the offing from Ireland lieth a ſand banck of forty fathom deepe, where commonly fiſhermen lye to fiſh, that is a certaine marck of the diſtance of the land, when you finde it, in cleare weather, and when there is good ſight, then you may ſee the high mountaine off Dongarvan.

Betwixt Iochull and Dongarvan within in the land, lyeth that ſaid high mountaine farre above all the other Land, ſhewing it ſelfe with three toppes, being called Cape de Quin, or Kary Quin. Sayling alongſt the ſouth coaſt of Ireland, you may ſee it farre off at ſea, and lieth northweſt from the haven of Waterford, therefore comming out of the ſea, and that mountain being northweſt from you, and ſayling right with it, you ſhal without fail ſal right with Waterford.

Waterford.

The haven of Waterford lyeth about five leagues to the weſtwardes of the ſoutheaſt poynt off Ireland, being called Carnaroort, the coaſt betwixt both lyeth eaſtnortheaſt and weſtſouthweſt and ſheweth it ſelfe in the offing, within the land, with high hilles two and three double one above the other, but by the ſea ſide it is al lowe land, where you may ſee many flat Towers upon it, as you ſayle alongſt by it. The eaſt poynt off the haven is a low rock poynt, but it is cleane, upon it ſtandeth a high white flat Tower, called the Tower of Waterford, which you may ſee farre off at ſea, and is a perfect mark too know this haven by; there ſtand divers more flatte Towers to the weſtwards alongſt the coaſt, but this is better to be ſeen then all the reſt, becauſe it is white and higher then the other. The weſt poynt is a high and fowle poynt, there lyeth a ſhowld ſouthſoutheaſt of into ſea, from it the channel is broad and cleane, without it, is eleven and ten fathom deep, and in the havens mouth ſeven fathom, and ſomewhat further in ſixe fathom, it lyeth in north and north and by weſt, within this river within the eaſt poynt is a good roade in foure or five fathom, a league within the rivers mouth there lyeth on the weſt ſide a ſteepe poynt, from thence beginneth a ſhowld lying to the northwardes alongſt the ſhore unto the ſteep poynt of Paſſage, and ſhooteth over from that poynt with a tayle, towardes the eaſt ſhore. Paſſage is a village where men paſt over, lying on the weſt ſide of the river, a little to the northwardes of the foreſayd ſteepe poynt.

Tower of VVaterford.

Betwixt that village, and that point on the weſt ſide a good roade very fit as wel for them that are bound out, as for them that are bound up. In ſayling up you muſt take heede of a little ſhowld, that lyeth off by a caſtle (ſtanding on the eaſt ſide of the river) ſomwhat thwart over, the river downwardes, at high water there is no more then two foote water upon it, a man that looketh for it, may ſee it, it is alſo flat that a man may ſound it. About halfe a league northwards up the river from Paſſage, there goeth another river weſtwards up to Waterford.

The Saltees.

About halfe wayes betwixt the haven off Waterford and the poynt Carnaroort, lye 2 little Ilands about half a league from the ſhore, called Saltees, the ſouthermoſt is the greateſt and lieth diſtant from the Tower of Waterford, directly eaſt almoſt three leagues. Betwixt theſe two Ilandes, you may ſayle through in five, ſixe and ſeven fathom, but you muſt keep neereſt the ſmalleſt or northermoſt Iland, for to avoyd ſome ſuncken rockes that lye at the north end of the great Iland, and at low water are drye.

From the northermoſt or ſmalleſt Iland off the Saltees towardes the maine land, lyeth off a ledge off rockes where men were wont to goe over on foote, but now may ſayle over. For to ſayle betwixt the Saltees and the main land, you muſt leave two thirds of the diſtance of water from the Ilands, and one third part from the maine, and you ſhall have at low water about two fathom deepe.

Kinbegh.

Kinmor.

About a half league without the ſouthermoſt Iland of the Saltees, lyeth a rock above water, called Kinbegh, and ſouthweſt about ſo farre from it, and ſouth and by weſt from the ſouth end of the Saltees lyeth a ſuncken rock, called Kinmor, of the bigneſſe of a ſhip, it cometh with halfe ebbe even above

water, it is ſo ſteepe that a man may lie with a ſhipps ſide againſt it, and have 14 fathom water, ſo that a man (without any danger) may ſayle alongſt by it, as neere as he will. A man may alſo (if need require) ſayle through betwixt Kinbegh and the greateſt Iland of the Saltees, but a ſeaboard of all is beſt and ſecureſt.

The Frails. To the eaſtwards off the rock Kinbegh, ſoutheaſt from the greateſt Iland of the Saltees, lye alſo ſome ſuncken rockes, called the Frailes, which may be ſeen at low water, there men may alſo ſayle through within them. Northeaſt from the Saltees lye alſo two rockes, the ſouthermoſt is called the Tuns, and the northermoſt the north rocke.

Tuns and northrock

Blackrock Northnortheaſt from the greateſt Iland of the Saltees, or from Kinbegh, and ſouthweſt and by ſouth from Carnaroort, lyeth one rock above water, called Blackrock, that is cleane and cleare round about, ſo that a man may ſayle round about it freely, without feare of danger. But a quarter of a league eaſtwards from it, lyeth a ſuncken rocke, called the Barrell, of that a man muſt take heed.

Barrell.

Under the Ilands of both the Saltees, a man may ride, under the greateſt at the northweſt ſide neereſt the north end: the marke or knowledge of the road is, a black rock like a boat turned upſide downe, right againſt that you muſt anckor in ſeven, eight or nine fathom, there it is good ſand-ground, and landlockt for an eaſtſoutheaſt, ſoutheaſt and a ſouth winde, a ſouthweſt winde bloweth alongſt the ſhore. If you anckor neerer the ſhore in 5 fathom or thereabout, there it is rough ground.

Road under the Saltees.

Under the ſmalleſt Iland a man may ride at the eaſt ſide in 7 or 8 fathom, ſo that the north poynt of the Iland lye north-northweſt from you, there you ſhall lye neere the land-lockt for ſouthweſt and northweſt windes.

From the point of Waterford the ſhore lyeth to the eaſtwardes, within the Saltees, eaſtnortheaſt, until Carnaroort, with many bayes, and all oaſie and black ſandy. A man being acquainted there; ſhould for neeſt, at many places finde good roads, there is nothing that can hurt you except a little fowle place a little to the weſtward of Carnaroort cloſe by the ſhore.

For to avoyd the fowle grounds of the Saltees. He that commeth out of Waterford, and will goe about to the ſouthwards of the Saltees, muſt not go more eaſterly then eaſtſoutheaſt, for to go cleare of the fowle grounds, which lye to the ſouthwardes of the Saltees, and when the Saltees ſhall be north of him, then lyeth the courſe from thence to the Tuskar, directly northeaſt, or a little more eaſterly. But for to go alongſt without the Tuskar, a man muſt goe at leaſt northeaſt and by eaſt to goe cleare of him.

Tuskar. The Tuskar is a great black ſmooth rock, lying like unto a ſhip turned up-ſide down, but is about twice ſo great, at the north ſide of it lye alſo two ſmall rockes under water. The Tuskar lyeth from the poynt of Grenoore S.E. and by E. and E.S.E. diſtant one league: from the Saltees N.N.E. foure leagues and a halfe, from Black-rock alſo E.N.E., two leagues & a halfe, & from the Landes end of England N. and by weſt.

Smaels. Southeaſt and by ſouth about ten leagues from the Tuskar, lye two little Ilands cloſe one by another, about foure leagues from Graſholme, called the Smaels, at high water and ſpring tydes the water floweth over them, the northermoſt is called Scakum, and the ſouthermoſt is called Kamey, there lye off in the ſea 2 little ſhowlds from them, the one north-N.W. and the other S.S.E. Betwixt the Smaels and Graſholme lyeth alſo a ledge of rockes, which at low water may bee ſeene above water. It is not without great danger to goe through betwixt them both, eſpecially with calmes, by reaſon of the tyde that runneth very ſtrong there through; and eaſtſoutheaſt moone maketh high water without the Smaels.

Maſcus rock. From the Tuskar eaſt and by ſouth about eight leagues, lyeth alſo a great rock, with many ſmall rockes round about it, called Maſcus. Hee that commeth from England and will ſayle towards Ireland, muſt, take great heed thereof, eſpecially when as through weſterly or northerly windes he ſhall be driven a little to the eaſtwards of the courſe.

Road under Carnaroort. For to anckor under the poynt of Carnaroort, comming from the weſt, you muſt take heed to come no neerer the ſhore then in ſixe fathom, untill that you ſhall be paſſed by the high hill that lyeth to the weſtwardes of the point, when you ſhall have brought out the mill to the eaſtwards the length of a capſtone barre, then you may anckor in 9 fathom, there is very good riding.

From Carnaroort S. Margets, bay, the ſhore lyeth along northeaſt one league, it is betwixt both rocky and fowle, but the fowle ground lieth not farre off at ſea. For to keep cleare without it, you muſt keepe ſo far off the ſhore that you may ſee the toopers of the double land within about the cliffe land, and you need not feare, but if you come ſo neere the ſhore that the double land within, be covered of the foremoſt cliffe land, or that thereby it get out of your ſight, you ſhall then ſurely ſayle upon the foreſayd rockes.

By S. Margets Bay upon the foreſayd land ſtandeth a Gentlemans houſe in the hills, when you have brought that with the mill that ſtandeth within, one in the other, then you may goe into the roade, and leave the rockes which lye above water halfe waies over the bay, either on ſtarboard or larboard of you, anckor there in five or ſixe fathom. ſandy ground.

Caliach. About ſouthſoutheaſt from S. Margets Bay off at ſea, lyeth a ſuncken rocke, that at low water lyeth dry, called Caliach, for to avoyd it, take heed unto theſe markes: when you come from Carnaroort, and have Black rock with the great Iland of Saltees one in the other, and keep them ſo, and then ſayle on northeaſt, you ſhall goe right upon this ſunken rock. For to goe to the ſouthwards of it, then keepe Black rock with the ſmalleſt Iland of the Saltees one in the other, or els for to goe to the northwards of it, keep Blackrock without or to the eaſtwards of the great Iland, and then you ſhall not need to feare any danger of this ſuncken rocke.

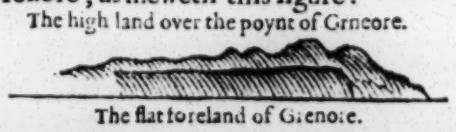
Marks for Caliach.

From S. Margets bay to the point of Grenore, lyeth the coaſt northeaſt halfe a league.

Riffe off Grenore. The poynt of Grenore is not very high, but ſteep and flat on the toppe, off from it goeth a ſhowld about a quarter of a league into ſea eaſt and by ſouth, of very rocks and ſtones, the which at low water falleth dry a good wayes of the ſhore. The ſhips comming from the ſouthwards that are bound for Dublin or Waſhford, goe in commonly betwixt the Tuskar and the foreſayd rockes of Grenore, for to com within the banks or ſands. Oftentimes they goe into Waterford for to hire a Pilot to bring then them up. For him that will be his owne Pilot, wee will deſcribe all the markes that are to be taken heed of, as well for to ſayle into Grenore, as alſo into the deep or haven of Waſhford, as they are now at this tyme, and hereby doe adviſe men that they doe not alwayes continue ſo, becauſe by reaſon of the floods, the channell doth ſhift, and ſtretch it ſelfe out more northerly, and alſo waxeth deeper.

Comming out off the ſea about a league or two neere unto Grenore, you ſhall ſee the high ragged double land high above the poynt of Grenore, which (as is aforeſayd) is not very high, but flat on the top. By that ſayd high ragged double land within, men do know the entrance of the channell of waſhford, when men doe come from the ſouthwardes and the eaſtwardes. When you have ſight of the poynt off Grenore, you may boldly goe right with it, untill that ſayd double land, doe ſhew it ſelfe, by eſtimation, but a mans length above the poynt of Grenore, as ſheweth this figure.

The high land over the poynt of Grneore.



The flat foreland of Grenore.

Then are you farre enough from the ſhore, not to bee in any danger off the ſhould off Grenore: Or els you may fit your ſelfe that you come no neere the ſhore then in ſixe or ſeven fathom: but yet for need a man may borrow off the ſhowld in five fathom, or foure fathom and a halfe, but you muſt alſo take heed that you goe not ſo farre off from it, that you have more then eight or nine fathom depth, otherwiſe you ſhould come to neere the banck that lyeth to the northwardes of the Tuskar, which on the inner ſide is very ſteepe and needle to, upon it is no more then tweleve foot water, and cloſe by it ten fathom deepe. If that you keepe the foreſayd ragged high land as is before ſayd) a mans length above the land of Grenore, and ſo ſayle to the northwardes, ſo long untill you bring that ſame high land without or to the northwardes of the ſteepe poynt of Grenore, then are you yet right againſt the ſhowld, and muſt yet ſayle to the northwardes, keeping the mill that ſtandeth next unto the point of Grenore, ſo that you may ſee the top of it even right over the ſteepe point off Grenore. Whē you keepe it ſo, you ſhall not be in any danger of the ſhowld or riffe. Then as ſoone as you ſee a caſtle (which ſtandeth a little without the ſtrand) come without the point of Grenore, then may you boldly ſayle towardes it, by your lead, into the Bay of Grenore.

Greenbay.

The ſayd mill ſtands upon the land off Grenore, a little within, the land, that can ſerve for a mark for not to come to neere as well to the ſhore as alſo to the ſhowld or riffe, for if you come not ſo neere the ſhore that you leeſe the mill out of your ſight, but keep ſo farr off, that you keep ſight of it, then doe you keepe farre enough from the ſhore, and from that rocky ſhowld or riffe. Then when the mill ſhall come to be ſouthweſt and ſouthweſt and by ſouth from you, then you

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are even passed the showld or riffe, go then northwest and by west, and northwest, according as the winde and tide shall be into the Bay of Grenore.

Or els you may observe another marke: Sayle on so long north, nntill that you see a long black house come out to the westwardes off Grenore, upon the low land, the which sheweth like a black rock upon the land: then you may looffe on towardes the shore in foure or five fathom alongst by the riffe, and run in so untill that you get six or seven fathom, and presently afterwardes shall be eight or nine fathom deepe, but then afterwardes it showlds by little and little, as you come neere the shore.

If you have a large winde: then sayle so long to the northwards untill you see another little black house come out without the point, sayl then unto it, you shall (so doing) have no danger of the riffe.

In the Baye it is showld water, you may lye there so neere the shore as you please, in six, five, foure, and also three fathom, and there you can get a Pilot to bring you to Washford.

For to sayle out off Greenbay.

For to sayle out of the Bay of Grenore, you may run out so close by the shore, that you may see but the wings off the mill over the Foreland, and so goe on eastsoutheast into sea alongst by the riffe, or according as the winde and tyde shall bee, so long untill that you may see the roofe of the mill, then you may goe larger, and by little and little goe more southerly, and then you shall see it ripple upon the riffe.

For to sayle to Washford

For to sayle out of the Bay of Grenore towards Washford with a ship that draweth little water, you may boldly runne alongst by the shore, and sayle through betwixt the Haenmans path and the Souder, that is a channell where at high water and ordinary tydes is eight foote water; but with a spring-tyde there is ten foot water.

The Haenmans path is a dry sand, which maketh the south side of the channell of Washford, lying off from the Soudre.

The Soudre that is the south poynt of the maine land of Washford haven.

Showld of Washford.

But if your ship goe deeper, then you must (sailing out of Greenbay) goe further off from the shore, for to come without the sand that shooteth of from Haenmans paths, yet you must also take heed not goe to farre there-off, for if you come so far off in ten fathom, you shall come to neere unto the banck that lyeth without, which is on the inner side very steep and needle to, therefore go no further off the shore then in seven, eight or nine fathom, but comming somwhat more northerly about Haenmans paths, then you may well goe off into tenne and eleven fathom; also you may not come neerer Haenmans paths then in seven fathom.

If you desire to be upon the barre off Washford and to leave the showld off Haenmans paths, to with, to goe to the northwards, then take heed unto these markes: At the north side of the channell off Washford lyeth a high hill with a round hommock, which is to bee seen over the Foreland, and a little castle in the low land, a little above the [illegible]nd, against the land to looke on; bring that round hom[illegible]k a little to the northwardes off the castle, and sayle so in, but bring not the hommock within or to the southwards off the Castle, for then you should bee in danger of the sand of Haenmans paths, unlesse it were by neede, and with a bare wind, then you might borrow so neere to bring them one in another, and so to sayle in, but it is best to keep them somwhat out one off another, to with, the little Castle to the southwardes of the hommock.

If it should happen that you could not see these foresayd markes well, nor discerne them, then you may goe about the sand of Haenmans paths by your lead in seven fathom without any danger.

For to know then when you are far enough sayled to the westwardes, or are past Haenmans path, and are open before the channell, you shall see in the south-land a little Castle that standeth about foure leagues in the land within the strand, in the side of the high land of Washford, about southwest and by west from you', when that shall bee upon that poynt from you, and that it standeth betwixt the two northermost little sand-hills, that are upon the foote strand off the Soudre (which is upon the south shore) then are you past Haenmans paths, sayle in then upon the marks of that little Castle, and the little sand-hils over the barre of the haven; there it is at high water about sixteen foot deepe.

As sone as you are past the outermost flat at the poynt off Haenmans paths, you shall goe somewhat neerer to Haenmans paths, although it bee very steep, that the tyde doth not bring you upon the tayle off the north-grounds, where the mast standeth, that is a fore-mast off a shippe that is there lost, and lyeth there suncken into the sand, by the fore-mast the north grounds are very steep and needle to, but without and within very flat going up.

In this channell and upon the Barre an east and west moone maketh highest water: but the flood runneth yet afterward a half tyde strong by the channell to the northwards; so that when it is highest water in the channell and upon the Barre, yet runneth the tyde thwart over the channell, therefore a man must keepe him so neere to Haenmans paths, as is said, that is the cause that the tayle of Haenmans path is cast up still more and more to the northwardes, and that the channell now lyeth out more to the northwards then it was wont to doe: And yet hereafter it is like that it will stretch it selfe more to the northwards, so that the foresayd markes) by the likelyhood) wil not continue certaine alwayes. Even as the flood after the highest water, runneth yet a halfe tyde or 3 houres strong (in the channel) to the northwards, so also runneth the ebbe a half tyde to the southwards after the lowest water, but not so strong as the flood.

Being over the showldest of the Barre, you shall have 3, three and a half, and foure fathom, and in the channell betwixt the north grounds and Haenmans paths against the mast 5, fathom depth, runne in by Haenmans paths, all alongst untill you come to the foot strand, and then edge over to the north shore, for to avoyd the grounds which lye to the westwards above the Soudre, you may borrow of the showld on the north side, by your lead, into ten or eleven foote, according to the draught off your shippe. In the right deepe off this edging over, you shall have at high water, fifteene foote depth.

The marke of this edging over is a white little castle that standeth on the north side of the haven in the valley of the Land, when that commeth over the steep poynt of the innermost Iland to the two that lye by the north shore, and seemeth to be about a mans length high, then you may bold ly run in northwest with it, untill that a little chappell within the Land, and to the southwards of Washford) a little or about a cables length to the northwards of that other forenamed little Castle on the north side of that high ragged land, that hath served for a marke to sayle over the Barre) cometh over a black hommock that you may see upon the high land, a little to the southwards off the Castle of Washford, when you shall have brought these marks one in the other, edge then over again to the south land upon the marks for then you shall be above the sands of the Soudre; and with that course also shall not be in danger of the taile of the sand that shooteth off from the poynt of Passage, which is on the north side, but it is there broad and large, that a man may there turne to and againe, it is altogether showld water, of 10 and 10 foot and a half at high water. Sailing up upon these foresayd marks, you shall come about the distance of a shot of a cast peece without the castle of Washford to the south shore sayle then in alongst by it, and keep the sounding on the sounding of the shore untill you com within the castle, there you may anckor, and shall find there about 3 fathom water; For a man that is there unacquainted, it is best to anckor there, because before the towne lye some suncken rocks; he that will lye before the town, must (right against the kay, or the head of the market) go a good ways off the shore, because a sunken rock that lyeth thereabouts; and go right against the west end of the towne, and anckor there in 3 fathom, or thereabouts.

To the southwards of the sands', that lye to the westwards or above the Soudre, goeth a dreeke through, there is more water then in the edging over to the northwardes off the sands. The marke for to sayl through there is: That you keep the highest hommock of the high ragged land (behind Washford) right over the castle of Washford, but there can be nothing gotten by it, with sailing through there, in regard you must nevertheles go over the showldest, after that you are passed the sands of Soudre, to wit, over the foresayd depth of ten and eleven foot.

For to sayl out from Washford, with a ship that goeth deep, you may not lade no deeper then ten foot, or ten foot and a half for to come over the foresayd showld; you shall then sayl about to the northwards of the showld that lyeth within, or to the westwards of the Soudre, and goe in and anckor betwixt the showld and the Soudre, there you shall be landlockt for all windes, except for the southwest winde you have little shelter, you shall therefore bring out your best anckor, in the southwest, and the other in the northeast, because that the winds that com out off the southwest over the land, doe not put you upon the north grounds. There at the Soudre, you may take in the rest of your lading, it is a league from the towne.

If you will anckor before the Barre of Washford for to stay

for

for the tyde, you muſt anckor a little to the northwards of the Barre, and go of ſomewhat until you have 8 fathom, there it is cleane ſandy ground.

In the night there are two fires made upon the Soudre for the Fiſhermen for to come in by night, by the Haenmans paths, he that will ſayle in by them, muſt keepe the higheſt fire a little to the ſouthwards of the other, for to avoyd the north grounds.

Beſides the deepe alongſt by the Haenmans paths, the Fiſhermen have a little channell that goeth out cloſe by the north ſhore, it is there about ſixe foot deepe at high water.

Channell through the banks before VVashford

From the Barre of Waſhford a man may ſayle eaſt and by S. and weſt and by north out and in through bewixt the banks into ſea, or out of the ſea, that is a large and broad channell.

For to ſayle from the Barre of Waſhford within the ſands through towards Dublin, you muſt keepe the ſounding of the ſhore, and runne alongſt by it in ſixe, ſeven or eight fathom, you ſhall ſo ſayle alongſt about a cables length from the ſhore, which is very cleane without any danger, ſo that any man (having but a little knowledge of the Land) may ſayle there alongſt by night, only you muſt take heed not to goe further of the ſhore then in 7 or 8 fathom, for not to come fowle of the banckes, which are on the innerſide very ſteepe & needle to.

When you are ſayled to the northwardes alongſt by the ſhore, about two leagues from the Barre, you ſhall ſee three white ſpots or rockes in the ſand-hill, a little to the N. wardes thereof ſtandeth a peece of a wall, much like a pillar of a Church: Right againſt this pillar, a great Engliſh mile from the ſhore, beginneth a ſand, called the Ruſch and Ramme, lying from thence alongſt the ſhore to the northwardes, you may ſayle about it on both ſides, but it is beſt to keepe the ſhore, and to runne through there within in ſixe or ſeven fathom, as is ſayd out off feare off the outtermoſt banckes, which are very ſteepe, and therefore cannot bee founded; Therefore men doe ſeldome uſe to ſayle there a ſeaboard of this ſand.

Right againſt this forenamed Ruſch and Ramme, the ſhore maketh a Bay unto the poynt off Glaskarrick; when you are ſo farre is this poynt, then you are paſt the foreſayd ſand.

Poynt off Glaskarrick.

The poynt of Glaskarrick is a low poynt, a little to the northwards of it ſtandeth a caſtle.

Channell through the banks before Glaskarrick.

When you are without the bankes in the north channell, and deſire to come within the banckes, then keepe that caſtle (if you can get ſight of it) a little to the northwards of the low poynt, and runne boldly right in with it, unto the land, without feare of the grounds, there is a good channell, through the banckes; you ſhall not finde leſſe depth then fifteene or ſixteene fathom, untill you come to the ſhowlding up againſt the ſhore. This Channell lyeth in northweſt.

For to ſayle from Glaskarrick to Dublin, run all alongſt by the ſhore (which is ſomewhat full of Bayes) and keepe you (as before) in eight, ſeven, or ſixe fathom. Two great leagues to the northwardes off Glaskarrick lyeth a ſand, a great halfe Engliſh mile from the ſhore, called the Glaskarmen, the ground is very uneven betwixt both. But nevertheles run through within that ſand and keep the ſounding of the ſhore, but not ſo far from it, that you come into ten fathom, for then you ſhould ſayle cloſe alongſt by the Glaskarmen, which is very ſteepe, and about two Engliſh miles, or a halfe Dutch mile long.

Glaskarmen.

Arckelohead.

One Engliſh mile to the northwards of Glaskarmen lieth the poynt of Arkelohead.

Markes for to avoyd the Glaskarmen.

Sayling through between the ſhore and Glaskarmen, to the northwards, a man may ſee 2 poynts, to wit, Mizanhead and to the northwardes off it Wicklohead. If you keepe Wicklohead even within the poynt of Mizanhead, then you can take no hurt of the Glaskarmen. But if you would ſayle a ſeaboard of the Glaskarmen, then keepe Wicklohead a good wayes without the Mizanhead, and ſo runne alongſt a ſeaboard of it, and you can take no hurt of it: But if you keepe the poynt of Wicklohead but even without the Mizanhead, you ſhal not fayle to ſayle upon the Glaskarmen.

Ledge at Arckelohead.

At the north poynt of Arkelohead lyeth a litle ſtony ledge very ſteepe and needle to. A man muſt take moſt heed of it (comming from the northwards) & bound to the ſouthwards, and then muſt come no neerer it then in five fathom, towards the ſhore lye ſome little rockes above water: when you come from the northwards; and thoſe little rockes are weſtnorthweſt from you, then are you paſſed it, to wit, to the ſouthwards of that ledge; and then you may againe borrow of the ſhore, upon the lead, commonly men doe keepe ſo farre of the ſhore, that they can take no hurt of the foreſayd ledge.

Baye of Arckelo.

At the north ſide of the poynt of Arkelo is a faire ſandbay, there is a good anckor ground, & alle over good riding in 8, 7, or five fathom, in this bay are good ſtore of herrings caught.

Right againſt Arkelo runneth alſo a channell through the bankes into the ſea. For to ſayle in there out of the ſes, looke out for a round hill within the land; bring that weſtnorthweſt, or weſt and by north off you, and ſayl then in there boldly, keeping it ſo. But if you bring the round hill weſt of you, and ſayle ſo in, you ſhall ſayle upon the poynt of the northgroundes, it is in that channell about ſeven or eight fathom deepe.

For to ſayl into the channell before Arckelo.

About an Engliſh mile to the northwards of the poynt is the river of Arkelo but very ſhowld, at high water there commeth no more then ſixe foot water.

The coaſt of Waſhford unto Wickely lyeth moſt north and by eaſt, a little more eaſterly: But he that will ſayle without alongſt by the banckes or ſandes, muſt not goe more northerly then northnortheaſt, for to avoyd the grounds which lye about Wicklo, three leagues off from the land. And to the ſouthwards the ſouth grounds ly ſcarce a league from the ſhore, there not long ſince a pilot keeping bad reckoning run without the ſandes alongſt north and by eaſt, and ſayled thwart of Arkelo, behind a taile of ſand that lyeth off from the north to the ſouthwardes, and there loſt his ſhippe. Arkelo lye from them (when they ſat upon the ſand) weſt and by ſouth.

Mizanhead.

About two leagues to the N. wards off Arkelo lyeth Mizanhead it is a black head. Betwixt Mizanhead & Arkelo in the fareway it is 8 & 9 fathom deep, it is alſo betweene them both alongſt the whole coaſt, good anckoring & cleane ground.

VVicklohead.

From Mizanhead to Wicklohead it is alſo 2 leagues, but this reach is ſhorter then the other to Arkelo.

VVolfe.

One Engliſh mile to the ſouthwardes of the poynt of Wicklo, lyeth a little rock cloſe by the ſhore, called the Wolf, it commeth at half tyde above water, the Fiſhers boats run through within it, but it is not to be done with ſhipps.

Horſeshoe.

Right to the ſouthwards of Wicklohead, ſomewhat further out then the poynt, lyeth alſo a rocky ſand, called alſo the Horſe-ſhoe, cloſe unto the poynt, about ſouth and by eaſt from it a man ſhould for need (when hee cannot do better) ſayle through there within it, but he muſt be very well acquainted with it, or els not well to be done; without, it is more certaine and beſt going off ſomewhat to the deep. If you keepe the poynt of Brahead a little without Wicklohead, then you can take no hurt off it, or if you keep the high inner land, ſo that you may even ſee it above the land of Wicklo, and goe not altogether hidden behinde it, then you goe there without it in 5 fathom. The poynt off Wicklo is ſteepe and ſtony with a double top little hill, within ſtandeth a little chappell, when you can ſee that through the ſaddle off the hill, then you are right againſt it, and have it on your ſide; the village of Wicklo lyeth to the northwards off the poynt in the Bay, there is a little haven, which at high water hath ten foot water.

In the Bay the ground is ſo hard & chinnell, that the anckors doe not hold there, but without the Bay ſomewhat farre from the ſhore, towards the Banckes, the ground is ſomewhat better.

Channell through the banks thwart of VVicklo.

Thwart of Wicklo alſo is a channell through the bancks for to ſayle that out or in, keepe the Caſtle of Wicklo, that you may ſee it open [illegible] poynt, thereupon you may boldly ſayle out or in.

Fourteene Engliſh miles from Wicklo lyeth the poynt of Breae, a high ſteep ſtony poynt, and the high land there about on the ſea coaſt.

Betwixt Wicklo and Brae lyeth out a flat poynt with a little Fiſher village, called Nicaſtell, there (ſayling alongſt) you have foure, five and ſixe fathom deepe, but from the flat poynt unto the ſteepe poynt of Brae, it is well fourteene fathom deepe, the land lyeth thereabout north and by north and by weſt.

Sugerloaf.

Within the land lyeth a high hill, off faſhion like a ſugorloafe, that is the fartheſt in the land off the three hills, which they call the Vineyards, when you have them through one another, and are northweſt, and ſo keepe them, then may you boldly therupon run through the bankes into ſea, or out of the ſea, upon theſe markes you may come in within the bankes, that is a very large and broad channell.

Thwart from that foreſaid ſugerloafe to the ſouthwards of Brae lieth a banke that is not deeper then 4 fathom, very ſtony and ſharp ground.

Braehead.

Braehead is very ſteep, likewiſe alſo the ground by it, is 10 fathom deepe cloſe by the ſhore, to the northwards of the poynt lieth a little tyde-haven, there ſtand the houſes called Brae on the north ſide.

Iland Dalke.

From Braehead to the Iland Dalke (lying at the ſouth point of the Bay of Dublin) the courſe is north and by weſt 4 Engliſh miles, there betwixt both goeth in a Bay.

At the N.E. ſide of the Iland Dalke lie ſome rocks, lying alongſt the maine not far from it. Men ſayle within the Iland through, & leave al the rocks and the Iland lieth to ſeawards.

The

The ſound of Dalke.

The Sound betwixt the Iland Dalke and the maine land, is called the Sound of Dalke, it lyeth northnorthweſt, and north and by weſt through, it is ſeven, eight, and nine fathom deepe men may anckor under the Iland, neareſt the Land, there is good ſandy ground, or ſomewhat further in, there lyeth a round rock, neareſt to the maine land, there men may make faſt a Cable on it, & an anckor thwart of the channell, towards the other rocks, becauſe of the tydes, for the tyde runneth there very ſtrong through. A S.S.E. and a S. and by eaſt winde bloweth there right in, but in regard it is there very narrow, there can goe no great ſea, with a S.E. winde you are landlockt of the Iland, and a ſouth winde commeth off the maine land.

From the Iland of Dalke, untill you are paſſed the village of Dalke, the ſhoare lyeth north northweſt and by weſt, before the village you have ſome ſuccour for a ſoutheaſt winde, the winde being more eaſterly, you lye in the open ſea. You lye therein 8 or 9 fathom, the nearer the Iland the deeper, the place is called the Berton road; you may not anckor further to the weſtwards then before the village: to the weſtwards of the village the ground is foule and ſharpe.

The north point of the Bay of Dubling, called Houth or Hedeho, is a very high point, it ſeemeth a farre off as if it were and Iland, but it is faſt to the maine land with a ſmall and very low necke: To the northwards of it lye the Iland Irelands-eye and Lambey, thoſe may bee ſeene (being to the ſouthwards of the point Houth, and being before the entrance of Dublin) over that foreſaid ſmall necke of Land.

From the Sound of Dalke to the Barre of Dubling, the courſe is N.N.W. in the farreway it is deep 9, 8, 7, 5, & 4 fathom the nearer the Barre the ſhowlder water. When you ſayle up', you muſt keepe the weſtermoſt Rocke that lyeth without at the Iland of Dalke, a handſpikes length open of the Iland, or the other rockes, and ſhall ſo come before the entrance, without having any let or hinderance of the ſand. Or you may ſayle more to the eaſtwards right towards the low land of the norther ſhore, and then by your lead alongſt by it to the Barre.

If you come from the northwards, you may runne in cloſe about the point of Houth by your lead, and then all alongſt by the norther ſhore, untill you come to the mouth of the Barre, there alongſt it is deepeſt water, but towards Dalk it is ſhowlder. From the ſouth ſhoare runneth off a great tayle of ſand, almoſt unto the north ſhoare. To the northwards of it goeth the deep in. Upon that tayle a little within the point ſtands a beakon of a maſt, made by the Engliſhmen called the Paerſing.

Paerſing.

Markes of the land.

For not to come too neare this foreſaid ſand, comming from the ſouthwards, looke out for the Iland Irelands-eye, keep that ſo, that you may but even ſee it over the low land cloſe after unto the high land of Houth, ſo you can take no hurt of that ſand. When the Tower of Saint Patrickes in Dubling, which ſtandeth on the land ſide of Dubling, commeth right over that beacon the Paerſing, then are you yet right againſt the point of the ſand which ſhooteth out a good way to the northwards of the Paerſing. For to goe cleare of that, you muſt runne ſo farre to the northwards, untill the Paerſing commeth right over a little Caſtle with three turrets, or little towers, which ſtandeth to the ſouthwards of the town, or when the Paerſing commeth betwixt that foreſaid little Caſtle, and the towne, then are you above the point of the ſand, then goe in weſt and by ſouth untill you come over the ſhowldeſt of the barre, there is at ſpring tyde 15 or 18 foot water, but at low water and neeptyde, not more then ſix foot, you may ſound it on both ſides. When you are over the ſhowldeſt of the Barre, then anckor within the ſand by the beakon in Poelbegh, there

Road in Poelbegh.

it is at high water foure fathom deepe. The marke of this road is, that you bring that afore written hill like a Sugerloafe that here before is ſpoken of, and ſerveth for a marke for to ſayle by into the Channell of Wicklo) over another lower hill, then are you in the beſt of the road, bring out your beſt anckor in the ſouthweſt, againſt the blowing of the ſouthweſt windes, which ſometimes come powring downe there very ſtrong out of the S.W. over the high land, and the other in the N.E. At low water the ſands lie dry there round about the road.

Road by Klantarie.

Men may alſo anckor ſomewhat further in, at the north ſide of the ſound, right againſt a village called Klantarie in a pool, where at low water remaineth 9 or 10 foot water: but round about the ſhip (as it is in moſt places of the haven) it doth fall altogether dry, ſo that there a ſhip hath but even roome to winde up to and again. Men do morre there S.S.E. and N.N.W. A S.E. and N.W. Moone maketh there the higheſt water.

If the ſhips that come there be any thing great, they muſt ſtay in Poelbegh, cloſe before the Town it is very ſhowldly, and falleth at low water altogether dry: with an ordinary tyde men cannot come before the towne with a ſhippe that draweth 5 foot water, but with a ſpring tyde with ſhips that draw 7 or 8 foot water.

At the north ſide of the river, a little further out then the town, right over againſt Ringſend, lieth a little Iland, within it is a fit place to make ſhips cleane.

The ſands or bankes that lie alongſt this Eaſt Coaſt of Ireland from the Tuskar unto Dalke, are on the ſouth-ſide, or on the eaſt ſide very ſteep and needle too, ſo that men may not come nearer them then in 24 and 25 fathom, in 20 fathom men are cloſe by them, they are not deeper at ſome places then in one fathom, or one fathom and a halfe: but at the north end by Dalke, about two fathom and a halfe, and three fathom deepe, all ſtony ground, and lye on the off ſide alongſt northnortheaſt, and ſouthſouthweſt, at the north end they lie about 8 Engliſh miles from the land. If you are bound for Dublin, and will go without theſe ſands, run then ſo far to the northwards, untill you kan ſee the little Iland (Irelands-eye) without the point of Houth or Hedehoo, run then right on to Houth or Hedehoo, and then you ſhall take no hurt of the north grounds.

Marks for to ſayle without the bankes

The N. point of the Bay of Dublin called Houth, is round about cleane, ſo that a man may anckor round about it. To the northwards of it lie the Ilands of Irelands-eye and Lambey. Irelands-eye is the ſmalleſt, it lieth betwixt the aforeſaid point Houth and Lambey: at the weſt ſide of it ſtandeth a little Chappell, right againſt it, you may ride. At the S. end lieth of a ſtony riffe which muſt be avoided. Right over againſt that Iland in the maine land lieth a haven for ſmall ſhips, at a little town called Malcheall.

Irelands eye.

Malcheall.

Under Lambey you may ride upon the north ſide for a ſoutherly winde, in 12 and 13 fathom, but for a ſea winde, you muſt ſhift, unto the weſt ſide by a Gentlemans houſe, and anckor there, but it is not very good lying there, becauſe alwayes there commeth in a great ſea.

Lambey.

About 5 leag. N.W. and by N. from Lamby, lieth the haven of Drodagh, betwixt them both (neareſt Lambey) cloſe by the land lie rocks, called the Skires. About 2 miles to the northwards of Lambey lieth a great rock called Rock a Bill, you may run round about it on both the ſides.

Drodagh.

Drodag hath a narrow crooked haven, which is not good to come into without a Pilot, or ſome one that is well acquainted with it.

Foure or 5 leagues to the northwards thereof lieth the haven of Dondalk, which is very ſhowld, and little uſed, at low water a man may go over a foot.

Carlingford.

North and by weſt about thirteen leagues from Lambey, ſeven leagues to the northwards of Drodag, and two leagues from Dondalk, lieth the haven of Carlingford: the north point of that haven is ſomwhat foule and rocky, but you may goe in about it by your lead: the ſouth point is very foule with rocks and ſuncken rocks, which you muſt ſhun, and runne in by the northerne ſhoare: Some ſay that men may runne in through betwixt the rocks and the ſouther point with ſmall ſhips, but it is not without danger. When you are within the ſuncken rockes, you muſt runne over to the ſouther ſhoare, and in alongſt by it, untill you come before the town of Carlingford, and anckor there in ſix, ſeven, or eight fathom, ſo ſhallow as you will; you may ſayle in upon the oaſe and ſave a Ship without anckor or Cables. Green-Caſtle lieth at the northeaſt ſide of the haven, 2 miles from Carlingford.

Green-Caſtle.

S. Johns point.

About 7 leagues northeaſt or ſomewhat eaſterly from Carlingford, lieth a point called S. Iohns point: betwixt both about halfe wayes lieth the mount of Carlingford, a high Mountain, From S. Iohns point lieth off a ledge of rocke, whereof you muſt take heed. A great league to the northwards of S. Iohns point, lieth Arglas, from thence forth to the haven of Strangford it is 3 ſmall leagues.

Arglas.

From the north point of the haven of Strangford, lieth off a foule ledge of Rocks. A little off from the ſouth point lyeth a ſuncken rocke, which at halfe ebbe commeth above water. For to ſayle into this Haven, you muſt leave this ſuncken rocke on the larboard ſide, and goe to the northwards of it, but muſt take good heed of the foreſaid ledge at the north point. A man may alſo goe in through to the ſouthwards of the foreſaid ſuncken rocke, betwixt it and the point (but to the northwards of it) is the beſt and the broadeſt Channell. Somewhat further in lyeth alſo another ſuncken Rocke at the N.E. ſide, that muſt bee left on the ſtarboard ſide in going in. When that you come then ſo farre as Audleys Caſtles, there you may anckor or runne in about the point on the larboard ſide, and anckor there under it.

About a league and a halfe to the northwards of Strangford lie the Rockes Southrocke and Northrocke, of them read as followeth.

From Strangford Haven to the Northwards lyeth the coaſt forth N. N. E. one league unto a point which ſome do call the point of Arglas, others the point or head of Molines; from thence falleth away the coaſt unto the Bay of Knockfergus northnorthweſt.

Point of Arglas. C. de Molines.

By the foreſayd point of Arglas or Cape of Molines, to wit, to the northwards of it, two little miles, lye two great rockes: the ſouthermoſt is called the Southrocke, it lyeth about two miles to the ſouthwards of the northermoſt, called the Northrocke. From the ſouth end of the Southrocke lieth a ledge of rockes at the leaſt two miles off, alſo one from the northeaſt point a great wayes N.E. off into the ſea. The N. rocke is a great plate of rocks, whereof many at high water are under water. There goeth alſo from it a foule ledge off unto the land, ſo that a man may hardly ſayle through betwixt the rocks and the maine land, except a man be extraordinary well acquainted. But betwixt the northrock and the ſouthrock goeth a faire broad Sound through, where men may well turn to and again, and at many places may anckor, it is all over good clean ſandy ground, 6, 7 and 8 fathom deep.

Southrock Northrock.

From the E. ſide of the ſouthrocke unto the Ilands at the E. point of the bay of Knockfergus, called Koppen, or Kopland Iles, the courſe is N.N.W. or ſomewhat more northerly, about ſix leagues: for when men ſayle from the E. ſide of theſe Ilands to the ſouthwards, with a S.S.E. way, they goe farre enough without the north and Southrocks. There betwixt them both lie divers more little Ilands, rocks, and ſuncken rocks, and ſhowlds, for the which men muſt take good heed when they will come neare by the ſhore.

The Koplands Iles lye about an Engliſh mile from the land, they are on the off ſide to ſeawards, cleane, but from the inner ſide there goeth off ſome ledges and foule ground, in the midway there going through it is five and ſix fathom deepe, but it is beſt to goe without, except for them that are well acquainted. The N. point of the Bay of Knockfergus, lieth diſtant from the Copland Iles 3 or 4 leagues N. W. or ſomwhat northerly, for which a S. E. courſe from the north point towards the foreſaid Ilands, that goeth farre enough without them.

Bay of Knockfergus.

The Bay of Knockfergus is a great broad Sound; about 3 leagues inwards in the Bay W. from Copland Iles, is the road before Knockfergus, there is good anckor ground in 3 fathom and a halfe. Somewhat more further out towards the N. point alſo on the N. ſide of the bay, ſtandeth a Caſtle, called Mouſehils Caſtle, by it is a ſandy bay, where is good anckoring as well for great ſhips as ſmall, for the N. and the N.W. winds, but a ſouthweſt winde maketh a bad road in theſe places.

Kow Iland.

A litle to the N. wards of the N. point of the bay of Knockfergus, lieth a little Iland called Kow, from thence lieth the Coaſt of Ireland forth N.N.W. about 9 or 10 leagues unto the

The Maids

Ilands of Raghleens. Betwixt them both lye the 9 Maydes one great league without the land, and two great leagues to the northwards of the Bay of Knockfergus, they are great Rocks, that lye but little above water, or low rocky little Ilands, and a multitude of rocks under water about them, that lie off ſo far to the N.N.E. that men cannot come neare them within 5 or 6 Engliſh miles. There goe ſome Creekes through the foule grounds, where men (for need) might ſayle through, but it is no wiſdome to go about it, when there is no need, and that men can do better. Not very long ſince, there came a man (by night unacquainted) therein, and runne throug onely upon the ſight of the breaches of the water, & got through without any hurt, but not without great feare and danger. He that commeth off from the faire Forland, muſt (at leaſt) goe S.E. and by E. for to runne alongſt cleare of theſe foule grounds. From the W. ſide alſo lieth off a little tayle of a ledge of Rockes towards the land. Further, it is there cleane, that men may ſayle through there within, but men muſt not come nearer the Maydes, then about halfe channell betwixt them & the maine, but the maine land ſo neare as they will, which is both cleane and cleare, with many Bayes, where men may every where anckor, yet here & there lie ſome Rocks, but they are all above water: There is nothing that can hurt you, but men may eaſily ſee it.

A great league to the northwards of the north poynt of the Bay of Knockfergus, & a halfe league S.S.W. from the Mayds,

Oldfliet.

lieth a haven called Old-fliet. For to know it when men come from the northwards, they ſhall ſee two flat little Towers, the one ſomewhat higer then the other, like as if men ſaw a ſhip with maine ſayle and foreſayle, without toppe or toppe-ſayles: theſe ſtand upon the north ſide of the bay.

At the S. point lieth a ſmall round little Iland or rock called

Iland knee

the Knee, a ſpeciall marke for to know this Bay; Men run in there amidſt the channel. But whē you come from the ſ. wards, & get ſight of the little Iland Knee, then run in cloſe about it.

From Old-fliet to the northwards unto faire Forland, the coaſt is very cleane, that you may ſayle cloſe alongſt by it, boldly without any feare, except you runne farre off from land, without the foreſaid Maydes towards the Scottiſh coaſt.

Faire Forland.

Faire Hid, or Faire Forland is the outermoſt north eaſt poynt of the maine land of Ireland, and lieth a little to the ſouthwards of the Iland Rachleens, ſo that this point and the e. point of Rachleens ly neare about ſ. & n. one from the other.

At Rachleens, or Faire Forland the north eaſt point of Ireland, come Scotland and Ireland neareſt one to another. The Rachleens is an Iland that men may ſayle round about, either to the northwards or to the ſouthwards, as they will, according as it happeneth beſt convenient with winde and tyde. At the ſouthweſt ſide is a faire bay, where is good lying almoſt for all windes. When men come from the weſt it ſeemeth to the S. wards of the Rachleens to bee cloſe without any opening, becauſe the eaſtermoſt poynt of Ireland Faire Forland, lyeth ſomwhat further out, behinde the Rachleens, but when they come neerer betwixt them, ſheweth it ſelfe open by little and little. On both ſides are the ſhores flat and cleane, ſo that men may anckor there where you will, either by the coaſt of the maine land of Ireland, in 8 or 9 fathom, or in the bay under the Iland in cleane ſandy ground. Over againſt the Rachleens,

Lombes Iland.

cloſe by the maine land, lyeth another little high Iland, called the Lambs or ſheeps Iland, to the ſouthwardes of it betwixt it and the main, men may not ſayle there about it, but betwixt it and the Iland Rachleens it is broad enough.

From the Rachleens unto the Skires Portruſh, the courſe is weſtſouthweſt diſtant 7 leagues. About two leagues to the eaſtwards off it, in the maine land, lyeth Porto Belletrie, a bad roade for great ſhipps, the ground is there fowle & ſharpe.

Chickens.

Betwixt Porto Belletrie and Skires Portruſh, neereſt unto Skires Portruſh, lye the Chickens, theſe are ſuncken rockes, which may be ſayled about on both ſides, for to come to anckor under Skires Portruſh.

Skires. Portruſh.

The Skires Portruſh is a rock Iland, it hath on the ſouth ſide a faire bay, where you may lye in ſixe and ſeven fathom, cleane and ſandy ground, land-lockt for al winds, except for the eaſtnortheaſt winde, which beloweth alongſt the ſhoare there open in. For to come under this Iland from the eaſt, you muſt goe cloſe alongſt by the ſhore off the maine land, for to ſhun theſe foreſayd ſuncken rockes the Chickens. It is there all over cleane and cleare: or els if you were minded to goe without, or to the ſouthwards off the Chickens, for to come under the Iland, you muſt ſhun the eaſt poynt of the Iland, becauſe off a ſuncken rocke that lyeth a little off from the eaſt point off the Iland. At the northweſt ſide of this bay is alſo a ſmall narrow channell, where you may ſayle through.

Banthaven

A little to the weſtwardes of Skires Portruſh lyeth the Banthaven, there alongſt you may ſayle up unto the new Towne Colran, it is a bad channell to come in, as well by reaſon of the ſtrong freſhunt that commeth out, as alſo becauſe it is very ſhowld: with ſhipps that draw eight foote water, you muſt have at leaſt 3 quarters of the flood before you can goe in.

The coaſt off Scotland.

Loughgrean.

The haven or ſound of Loughrean or Lookreen in Scotland by the point of Galloway, lieth diſtant from Faire Forland the northeaſt poynt of Ireland, E.S.E. about 13 leagues, but the poynt called Cantir, lyeth diſtant from Loockreen N.W. and S. E. 9 leagues, there betwixt them both goeth up a great broad ſound northeaſt in, called Dunbritain Firth, through

Dunbritaine Firth

which men ſayle up unto Glaskow in Scotland.

The ſound of Lookreen you may ſayle in, and a good wayes you may turn into and againe for to anckor there within for weſterly winde, if you doe come no neerer the Gores on either ſide then in foure fathom, you can take no hurt: you may anckor ſomewhat in, by the ſecond high point on the eaſt ſhore in 10 or 12 fathom.

Elze Iland

About ſeven leagues to the northwards of the point off Galloway in the foreſayd great ſound, lyeth a high ſharpe Iland, cleane round about, off faſhion allmoſt like unto a pook of Hay, called Ailza, or Elzee, there you may boldly ſayle round about it, it is there round about it, and cloſe by it eighteen fathom deepe.

From Elzee northwards ſixe leagues lyeth alſo another litle Iland, cloſe by the eaſt ſide of the great Iland Arren, called Lamblaſh, or Lam-Ile, cleane alſo round about, there you may ſayle round about it, and anckor under it for all windes in ten,

Lamme-Ile.

twelve, or thirteen fathom, to wit, within it, betwixt the Iland and the great Iland of Arren.

Commer-Ile.

Bay off Commer. Ile.

North and by eaſt and northnortheaſt two great leagues from Lamme-Ile, lyeth an Iland by the point of the maine land calleth Commer-Ile, on the eaſt ſide of it betwixt the

Iland

Iland and the maine land, you may ſayle through in to a faire bay, where men are land-lockt for all winds, and from thence may ſayle forth unto Dunbrittaine, or into the river Glaskow. The foreſayd Iland Commer-Ile lyeth from the Iland Elzee, about north and by eaſt. For know ledge of this Iland, when men come of from Elze, or from the ſouthwardes towardes this Iland, men ſhall ſee a great caſtle on the E. ſide of the maine about a great leagtie to the ſouthwards of Commer-Ile, and alſo a little caſtle, a good wayes to the northwardes, cloſe upon the water ſide, that ſtandeth right to the ſouthwardes of the Iland Commer-Ile, or the ſound that lieth there into the eaſtwards of it, upon the ſame Iland ſtandeth alſo a little caſtle cloſe to the water ſide. Runne in betwixt the Iland and the maine land, about N. N.E. in, and leave the Iland a great cables length on the larboard ſide, and the main land on the ſtarboard ſide you muſt ſhun more, becauſe of a great ledge that lyeth of from it towardes the Iland, and ſomewhat more northerly. Having Gotten cleare of the end of this ledge runne then right towards the maine land into the bay, or ſound, & anckor there in ten fathom, right againſt a ſtone houſe with an orehard thereby, it ſhall be then a ſtearne your ſhip about ſeven fathom deepe, and there morre your ſhip well.

To ſayle from Commer Ile to Glaskow.

For to ſayle out of the Sound of Commer Ile, towardes Glaskow, goe firſt N.W. and by N. unto by the poynt of the Iland, that is, to the weſtwards of you, and then north, alongſt by it, then by little and little more eaſterley, at length N.E. runne ſo all alongſt by the eaſterland, without leaving of it, you ſhall not faile to come to the Sound of Glaskow. Coming by the point runne cloſe about by it firſt eaſtnortheaſt, eaſt, and by ſouth, at leaſt eaſtſoutheaſt; all alongſt by the ſouther ſhore, you ſhall then ſee a caſtle ſomewhat a head upon the ſouther-land, cloſe upon the water ſides, with two tuffes of trees upon the high land right eaſtſoutheaſt from the caſtle; keepe that foreſayd caſtle betweene Tuffes of trees, and ſayle in thereupon, ſo ſhall you run right, alongſt the deepeſt off the Creeke, there is at high water five fathom, and at low water three fathom. From the north ſhore lyeth off a great ſhowld, which lyeth over the Sound more then two third parts from the norther ſhore; towards the ſouth ſhore it falleth dry at the loweſt water, there fore men muſt ſhun the norther ſhore, and runne alongſt by the ſouther ſhore. There ſtandeth a white caſtle upon the ſouth ſhore, right againſt that begin the foreſayd ſands. In the Creek it is ſoft ground, but towards the ſand the ground is hard, therefore when you feele by your lead that it is ſomewhat hard, that is a token that you come to neere the ſhoulds, ſaile then ſo forth upwards to Dunbrittaine, there lyeth a little Iland on the ſouth ſhore, which is it low water faſt to the Iland, when you ſhall be paſt it about two Cables length, then anckor there in five at high water.

A ſouth & by weſt moone maketh there the higheſt water.

Of the Tydes and Courſes of the ſtreames.

At Waterford an eaſt and by north, and weſt and by ſouth moon maketh high water.

Without the land in the fare way betwixt Silly an Ireland, a ſouthweſt and by weſt moone maketh high water.

In the channell or entrance of Washford, an eaſt and weſt moone.

The flood runneth there to the northwardes, after high water a halfe tyde, and the ebbe contrariwiſe to the ſouthwards, a halfe tyde after low water, but not ſo ſtrong as the flood.

On the eaſt Coaſtes or Ireland to the ſouthwards off the bay of Dublin, a ſouthſoutheaſt and northnorthweſt moone maketh high water?

At Dublin a ſoutheaſt and northweſt moon.

The flood runneth from the Tuskar without the bankes alongſt betwixt Ireland and England northnortheaſt, and the ebbe ſouthſouthweſt.

On the Coaſts a S.S.E. and N. N.W. moone maketh high water.

The flood commeth here from the ſouthwardes, and alſo from the northwardes, about the north part off Ireland, and meete one another about right againſt Carlingford, where they ſtoppe one the other. The ebbe contrariewiſe falleth (to the northwards off Carlinford) to the northwards, and (to the ſouthwards of Carlingford) to the ſouthwards.

On the coaſt of Ireland from the Southrock and northrocke unto the Coplands Iles, a ſouthſoutheaſt and northnorthweſt moone maketh full ſea. But to the northwards of it a ſoutheaſt moone.

On the Iland off the Ragleens and Skires Portrush an eaſtſoutheaſt and weſtnorthweſt moone.

The flood commeth there out of the weſt, and falleth through betwixt Ireland and Scotland: from the cape Cantir to the mull of Galloway, ſouthſoutheaſt, unto the Iland Man, there the floods out of the ſouth and north doe meet one to the other. The ebbe contrariewiſe falleth alongſt the coaſt northnorthweſt betwixt Ireland and Scotland to the weſtwards unto the Ocean ſea.

At Engliſtoun in the Sound of Glaskow, a S.W. moone maketh full ſea.

Courſes and Diſtances.

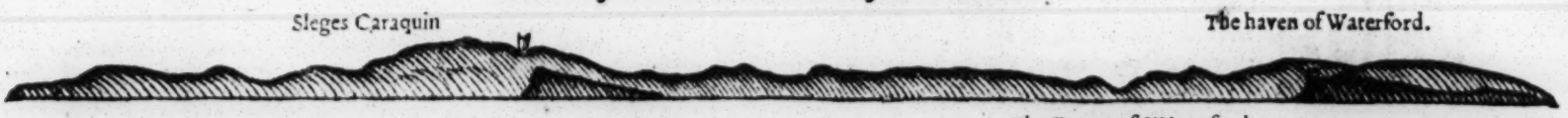
From Waterford to the Ilandes of the Saltees eaſt, but to goe about to the ſouthwards off them eaſt ſoutheaſt, —— —— 3 leagues
From the ſouth end off the Saltees to Black-rock northeaſt and by eaſt 2 leag.
From Blackrock to Carnaroort northeaſt —— 1 league
But to Grenore —— —— —— 2 leagues
From the Saltees to the Tuskar eaſtnortheaſt, but from without the fowle ground to the ſouthwardes of the Saltees northeaſt and northeaſt and by eaſt —— —— —— —— 5 leagues
From Blackrock to the Tuskar eaſtnortheaſt —— 2 leagues
From the Tuskar to Grenore northweſt and by weſt, and weſtnorthweſt 1 leag.
From Grenore into Grene-bay firſt northweſt and by north, and then weſtnorthweſt —— —— —— 1 league
From Greene-bay to the Barre off Washford, N. & N. & by W. one great leag.
From the Barre of Walshford unto Walshford about one league and a halfe.
From Waterford to Grosholm eaſt and by ſouth —— 24 leagues
From the Tuskar to the rock Maſcus eaſt and by ſouth, —— 8 leagues
From Tuskar to the rocks Smaels ſoutheaſt and by ſouth about 10 leagues
From Tuskar to the land-end of England ſouth and by eaſt —— 40 leagues
From VVaterford to the lands-end of England ſouthſoutheaſt but to Silly ſouth and by eaſt, ſomewhat ſouthery, —— —— 40 leagues
From the poynt off Glaskarrick to the poynt off Arkelo north and by eaſt 4 great leagues
From Arkelo to Mizanhead north and by eaſt, ſomewhat eaſterly 3 leagues
From Mizanhead to the poynt of VVicklo north and by eaſt ſomewhat eaſterly —— —— —— 2 leagues
From VVicklohead to the flat poynt by Nicaſtle north, —— 3 leagues
From Nicaſtle to the poynt of Brae north, and north and by weſt one league and a third part.
From VVicklohead to Brachead north, and north, and by weſt 5 leagues
From Braehead to the Iland off Dalke north and by weſt, —— 2 leagues
From Dalke to the Barre off Dublin northnorthweſt, two leagues and a half.
From the Sound of Dalke to the poynt Houth northnortheaſt. two leagues and a halfe.
That courſe runneth without the poynt Houth, Irelands eye, Lambey, and Rock a Bil.
The Bankes lye from the Tuskar to the north-end northnortheaſt and ſouthſouthweſt.
From the Barre off Dubling to Holy-hill in the Iland Angleſey eaſt and by ſouth —— —— —— —— 19 leagues
From the Barre to the Town Dublin weſtſouthweſt —— two leagues
From Lambey to Drodagh northweſt and by north —— 5 leagues
From Lambey to Carlingford north and by weſt —— 13 leagues
From Carlingford to S. Iohns poynt northeaſt, ſomewhat eaſterly 7 leagues
From S. Iohns poynt to Strangford northeaſt and by north —— 4 leagues
From Lambey to the South-rocke northnortheaſt, —— 21 leagues
From the Northrock and Southrock unto the Coplands Iles N.N.W. 6 leag.
From the Coplands Iles to the north-poynt off Knockfergus northweſt, ſomewhat northerly —— —— 3 or 4 leagues
One league to the northwards lyeth the haven off Oldefliet.
From Oldefliet to the Raghleens within the Maydes, through northnorthweſt —— —— —— 6 or 7 leagues
From the Ragleens to Skires Portrush weſtſouthweſt, —— 6 or 7 leagues

Heights.

Waterford, or the Tower of Waterford lyeth in 52 degr. or a little more.

How theſe Lands doe ſhew themſelves at Sea.

Sleges Caraquin



The haven of Waterford.

The Tower of VVaterford.

The ſheweth it ſelfe the land about VVaterford, and to the weſtwards, with the high land of C. Quin, or Cara Quin, when you come towards the land.



Thus ſheweth the Saltees, when they are 3 or 4 leagues weſt and by north from you.

Grenore.



Thus ſheweth the land between the Saltees and the poynt of Grenoort is about 2 leagues from you.

Grenore.



The figure following is to bejoyned unto the former, the AA one to the other.

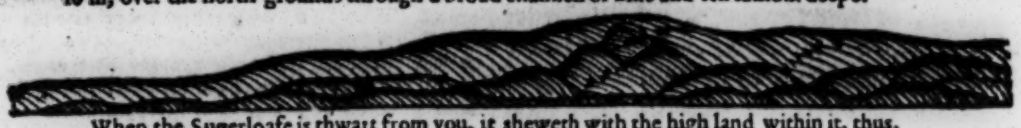


The land to the northwards of Grenoore ſheweth thus, when the northermoſt poynt, where the croſſe ſtandeth over, is north and by weſt about five leagues from you, and Grenoore ſouthweſt and by weſt, ſo farre that a man may but even ſee it from below, and then a man may ſee the Tuskar from the top in the ſouthweſt.

Sugerloafe. Brahead.



Thus sheweth the coast of Ireland when that Sugerloafe is northwest, and the poynt of Brahead northwest and by north about seven leagues from you. When that Sugerloafe commeth northwest and by west from you, then may you runne so in, over the north grounds through a broad channell of nine and ten fathom deepe.



When the Sugerloafe is thwart from you, it sheweth with the high land within it, thus.

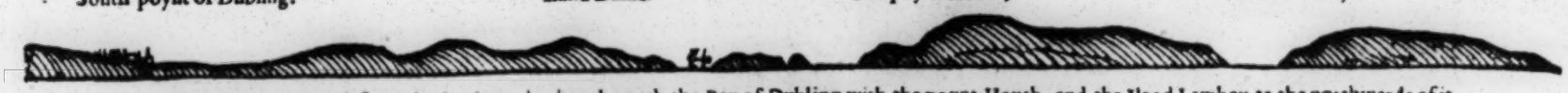
Sugerloafe Braenhead Iland Dalke.



Sound or Dalke.

Thus sheweth the coast of Ireland betwixt the Sugerloafe and the Iland Dalke, lying a the south poynt of the Bay of Dubling, when a man is about Braehead, one or two leagues from the land,

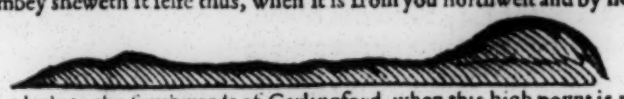
South poynt of Dubling. Iland Dalke. The poynt Houth, Iland Lambey.



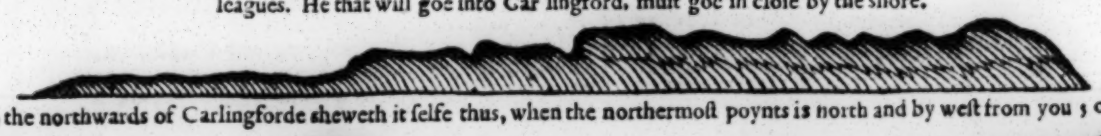
When a man commeth from the southwards, thus she weth the Bay of Dubling with the poynt Houth, and the Iland Lambey to the northwards of it.



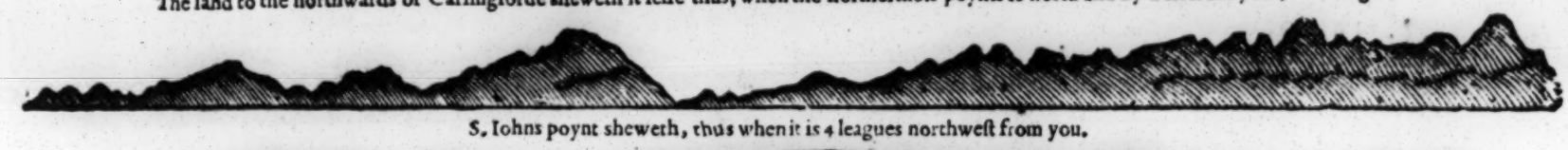
The Iland Lambey sheweth it selfe thus, when it is from you northwest and by north one league off.



Thus shewed the land a little to the southwards of Carlingford, when this high poynt is northwest from you about five leagues. He that will goe into Car lingford, must goe in close by the shore.



The land to the northwards of Carlingforde sheweth it selfe thus, when the northermost poynts is north and by west from you 5 or 6 leagues.



S. Iohns poynt sheweth, thus when it is 4 leagues northwest from you.



Thus sheweth the poynt of Scotland over against the Bay of Knockfergus, called the mull of Galloway, when men sayle alongst by it, a league without the land, and that the northermost and the low poynt is northeast from you, and the southermost southeast from you. Under the north poynt it is on both side good anckoring in 10 or 12 fathom, for southerly and easterly winde.



The Iland Elzee in the greate bay of Dunbrittain sheweth it selfe thus,



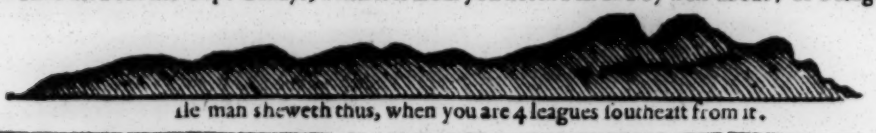
The Iland Lamblash, or Lam Ile on the east side of the Iland Arren sheweth it self thus, being 2 leag. of from it.



The Iland Commer Ile lying before the sound of Dunbrittaine, or Glaskow, sheweth it selfe thus.



Thus sheweth the Cape Canayr, when it is from you northwest and by west about 7 or 8 leagues.



Ile man sheweth thus, when you are 4 leagues southeast from it.

The fifth Demonstration,

In Which the Coast off Vlster and Munster from Bandhaven to Mizanhead, are declinated.

Lough-foile.

TWO leagues westnorthwest from Banthaven, or west and by north from Skires Portrush, lieth the haven of Loughfoile, before it lieth a great plate of sand called the Touns, which lyeth from the west poynt of the haven a great wayes to the northwardes off from the shore, when the winde is out of the sea, it breaketh very much upon it, with small shipps that draw litle water, men may sayle into Loughfoile haven at high water to the southwardes of the Touns, betwixt the Touns and the souther-poynt, called Magillions poynt, but it is there very uneven, and at full sea there cometh no more then eight foote water, but alongst to the westwards off the Touns, it is very deepe, men may sound about the Touns on the off side in foure fathom.

Touns.

For to finde the Channell that lyeth into the westwardes off the Touns, (comming from the east, or alongst by the Touns) you must looke out for a little sandy Bay, that lyeth on the west-side, even within the north-poynt of the river under the high land; bring it so, that you may see it open of the foresayd north-poynt, and sayle in there upon, untill you come by the land, and then runne in alongst by it southwest until you come right against Greencastle. If you come from the west or the north, you may boldly without feare runne alongst the shore, and about the poynt upon your lead, without comming neere the towne, you may see any thing that might doe you hurt, comming by Greencastle, there may you anckor so that you may see Withcastle without the poynt of Green-castle, there you may lye within the Towns, sheltred for windes out of the sea.

Road in Lough-foile.

For to sayle up from Green-castle, you must runne up alongst by the west shoare by your lead, and shunne the little sandes that lye here and there alongst that side, untill you come past With-castle, right against the three trees, there is the ordinarie road,

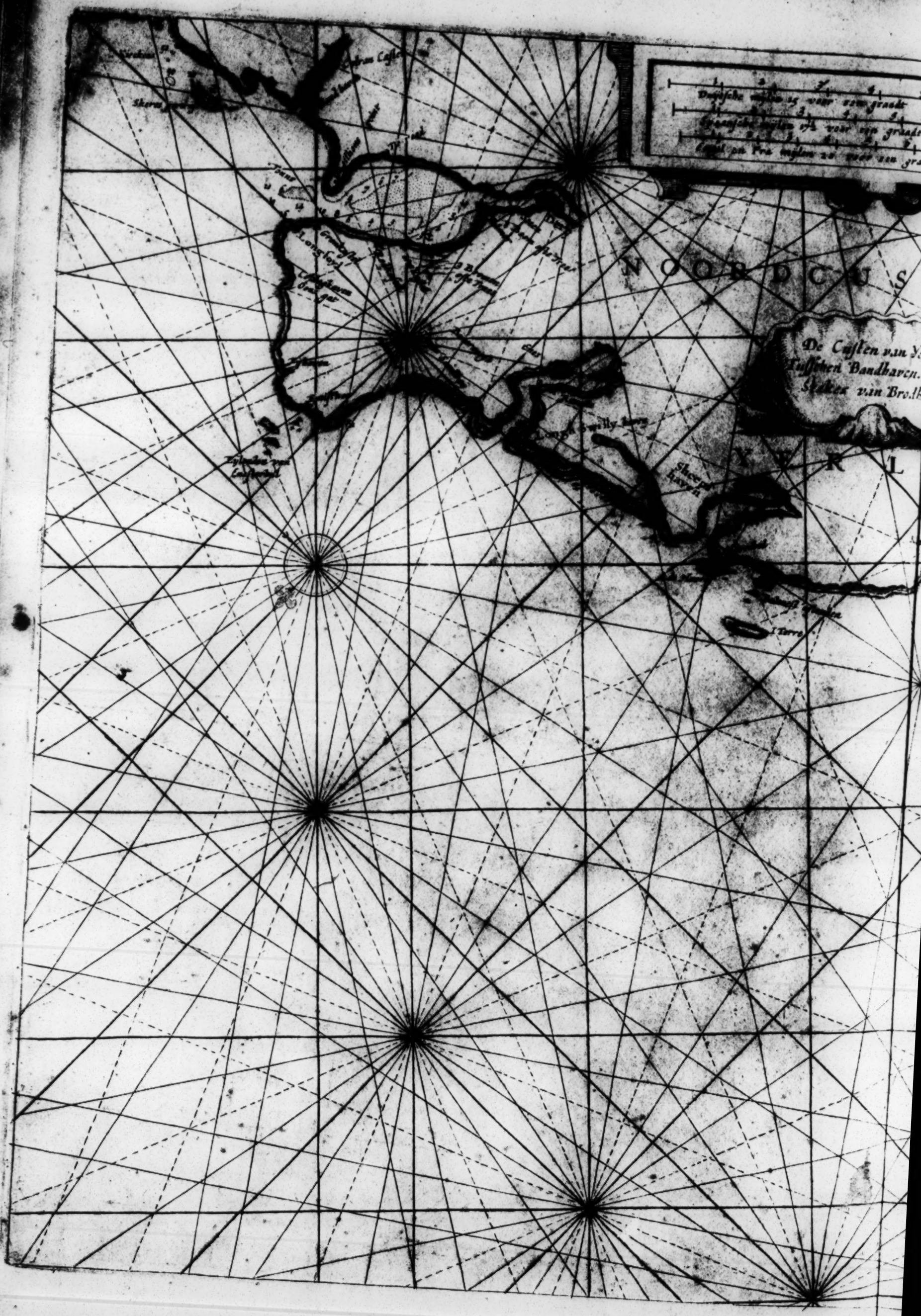
Betwixt Green-castle and With-castle neerest unto Green-castle goeth a Creeke or Slencke through the grounds, unto the easter shore, which is as deepe or deeper then the right fareway unto With-castle. When men come off from Green-castle, they must take good heed not to goe farre off from the wester shore, left they fall into that Creeke.

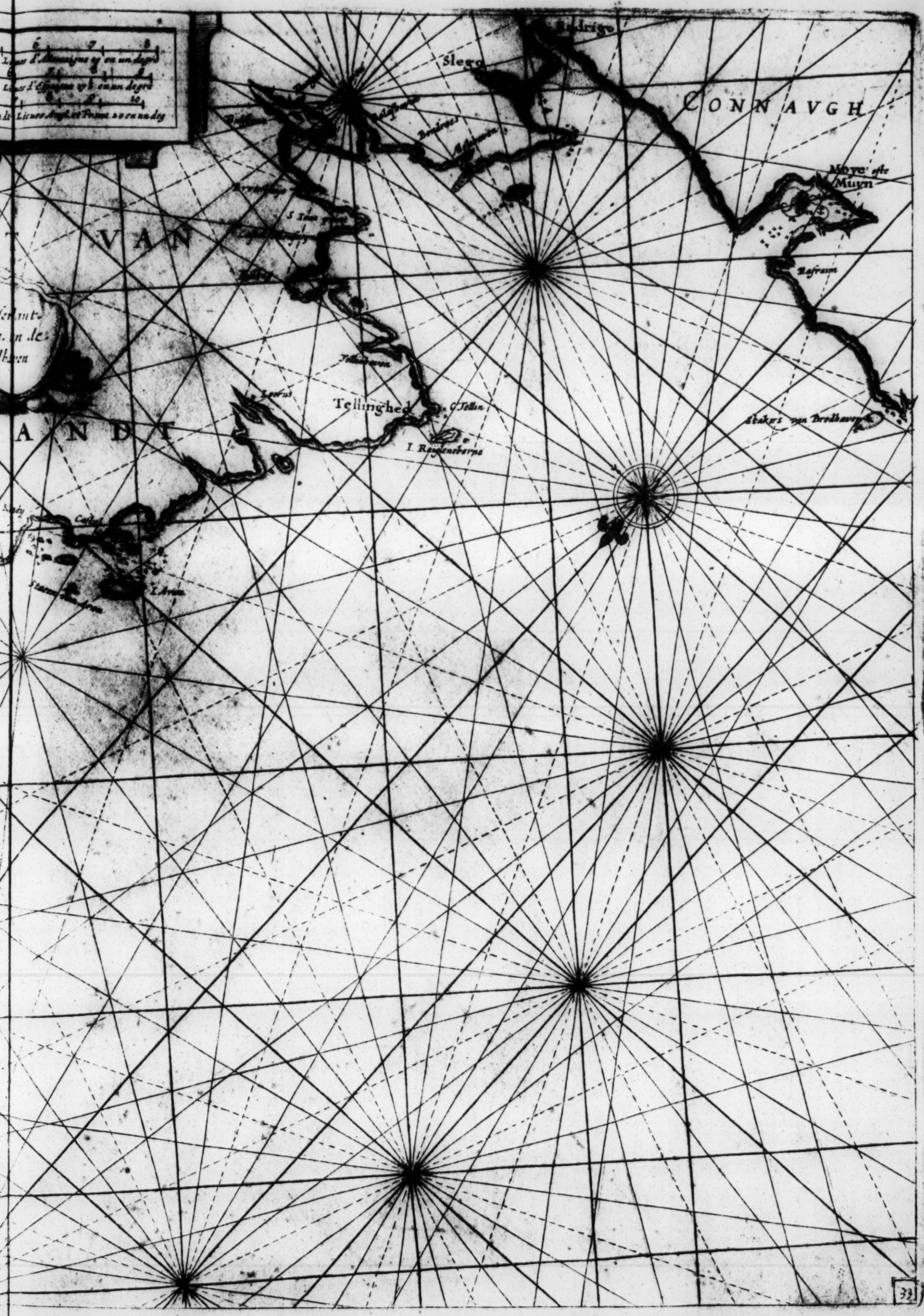
How men shall sayle from the foresayd roade forth up unto the Towne Derry, they may perceive or marke by the card.

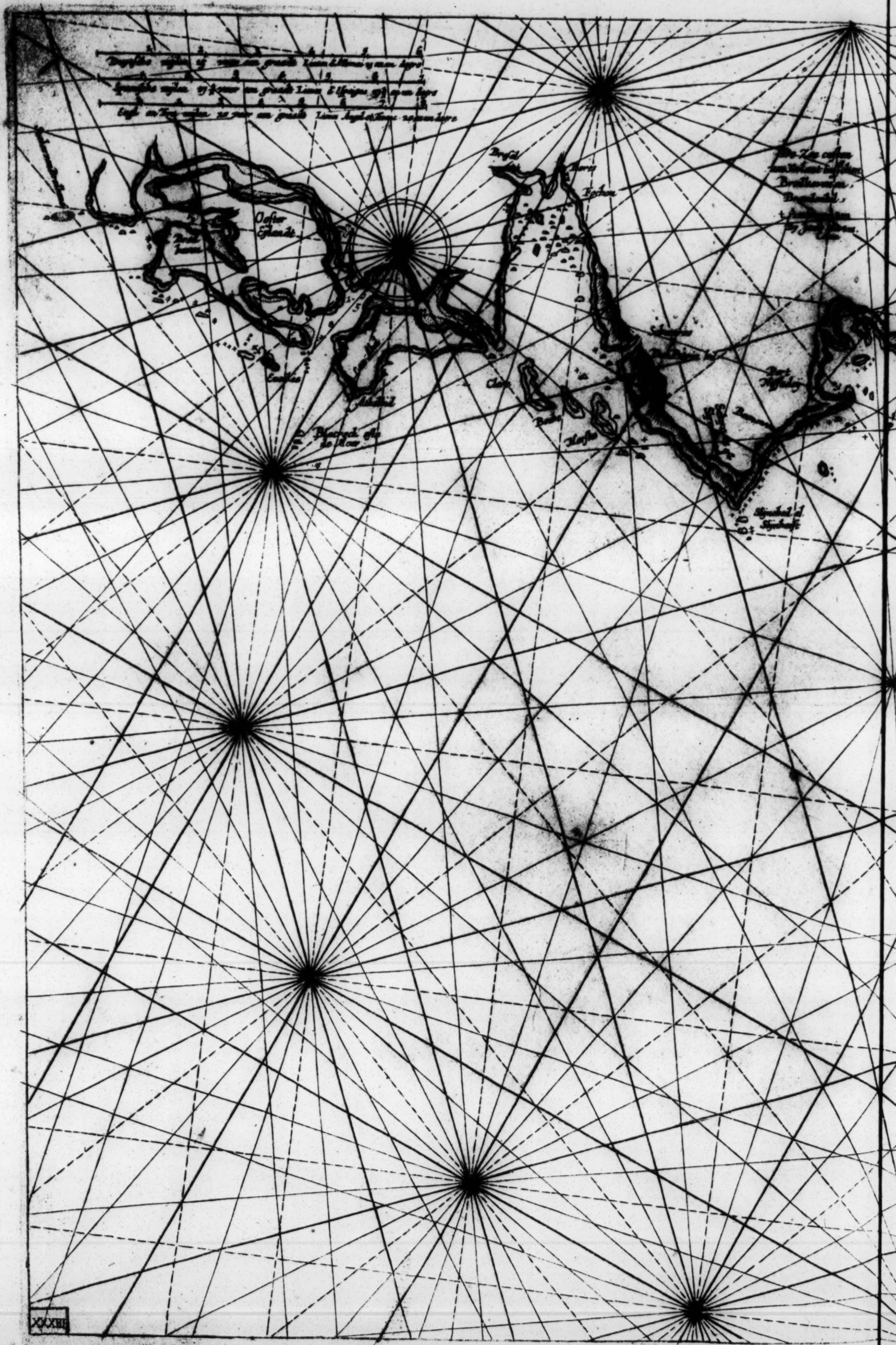
Ilands Enesterhull,

From Lough-foile-haven unto the Ilands Enesterhul (by some called Monsterhul) the course is northwest foure or five leagues, these are small black Ilands or rockes, not very high above water, and lye a little off the northermost poynt of Ireland, called Enistон, a high plaine land, & very good to knowe for him that hath once seen it. Betwixt the Ilands and the point men may saile through, but not without great danger for them that are not very well acquainted with it, because off much fowle ground and showlds that lye betwixt them both. Under the foresayd poynt Enistон, on the west side, men may anckor for easterly windes, or els to stoppe the tyde.

From


NOORDCUS
De Cuſten van
Cuſſchen Bandhaven.
Sheeps haven


Sledrigo
Slego
CONNAVGH
Moye ofte Muyn
Refrum
Telling hed
C. Tellin
I. Ragenesborne
Stukers opn Drodhaven
VAN
AND
Cattey
I. Arran
Tellingheden
Lyerus
S Thos Fort



Lymeryck

Clare

Hags

BRITISH
MUSEUM

Lough-Swilly.

From the Ilands Eneſterhul unto Lough-ſwilly, of ſome called Lockſilie, the courſe is ſouthweſt 7 leagues, that is a faire haven. For to ſayle in there, men muſt ſhunne the weſt ſide, and goe in alongſt by the eaſter ſhore: The land about Lough-Swilly is the higheſt land of the whole north coaſt of Ireland, and thereby it is alſo very good to know, for thoſe that (coming out off the north) do fall with the lands there abouts.

Foure or five leagues weſtſouthweſt, or ſomewhat weſterly lyeth a large broad haven, called Sheepeſhaven, but it is at ſome places fowle ground, within it men may lye landlockt for all winds. The weſt poynt lyeth out, called Hornehead, or Cape de Horne, upon it is a hill with two hommockes; to ſee to like two hornes and there after the poynt is named.

Horne-head. Cape de Horne.

At the weſt ſide of this poynt, men may ride and ancker within the rockes for eaſterly windes. Betwixt Lough-Swilly and ſheeps haven lyeth alſo a Bay, where men may ancker, but the ground is not very cleane, and right againſt it in the offing, halfe a league from the land, lyeth a ledge of rockes; which at high water are under, and at low water lye above water, men may (for need) goeth through betwixt it and the land, but without it is beſt and ſureſt.

Tore Ile. Ilands Baleneſſe.

Weſtnorthweſt about two leagues from C. de Horne or Hornhead, lyeth the Iland Tore, to the ſouthwards of it lye three Ilands, called the Ilands of Baleneſſe, men may ſayle through to the ſouthwards off Tore Iland, to wit, betwixt Ile Tore, and the Ilands of Baleneſſe, and alſo within the rocks.

Ilands off Aran.

From the Iland Tore to the Iles of Aran, the courſe is ſouthweſt and by ſouth 6 or 7 leagues, betwixt them both, not far

Staggs off Aran.

from the Iland Aran, lye ſome high rockes, called the Staggs or Aran. Alongſt all that coaſt betwixt Horne-head and the Ilands of Aran, is good ancker ground all over.

For to come to anker under the Ilands of Aran, comming out of the North, run alongſt by that great Iland, leaving it on the ſtarboard ſide, untill you be within it: goe then towards the ſouthweſt, and ancker on the ſouthcaſt ſide, there is the roade. Men may alſo ancker in the Ilands over againſt it towards the maine, in divers places, and lye landlockt for all windes.

Upon the northweſt point of Ireland, a good wayes landwards in lyeth a high hill, off faſhion allmoſt like a Sugerloafe, which is ſeen in cleare weather before any other land, at leaſt nine leagues at ſea: When that hill lyeth eaſt and by ſouth from you, and then ſayle in right with it, you ſhall not miſſe to fall right with the great Iland Aran.

From the Iland Aran unto the point Telling-head, called by the Iriſh cape de Telling, or Tellin, the courſe is S. S. W. 8 or nine leagues. Three or foure leagues to the northwards of C. de Telling lyeth an Iland, called Raiglene borne.

Cape de Telling. Telling-head.

At the Cape Telling lyeth a little Iland, halfe a league from land, men may ſaile through betwixt the Iland and the cape, boldly without any danger.

To the ſouthwards of C. de Telling, to wit, betwixt the Cape and the Stagges of Broadhaven, lyeth the land with a great baye, where in lye many goed Havens, as Tilling-haven, Kilbegh, Dungall, Ballaſhaven, Slego, Endrigo and Moye.

Kilbegh.

From the Cape of Telling unto Kilbegh lyeth the coaſt E. S. E. about foure leagues: betwixt both, about one league and a halfe from the cape, lyeth Telling-haven, a round bay with good ſandy ground, there may about 30 ſhips lye, weſt and ſouthweſt windes doe blow there open in, for all other windes men are there landlockt.

Kilbegh, or Kalebegh is alſo a faire round bay, but it is very narrow at the comming in of it: When men are a little from the ſhore, it ſeemeth to bee all cloſe without any opening. About a halfe a league to the weſtwards off this bay, a quarter of a league from the land, lyeth a little Iland, which is very low and plaine, at both ends going plaine downe, that is a good mark to know this foreſayd bay, men may alſo ſaile through betwixt the Iland and the maine, if they will. When you come out of the weſt, and are paſſed that Iland, then go neere the ſhore, which is clean and cleare, and go freely cloſe aboard of it, untill you ſhall ſee this bay open, and then ſayle boldly in, without any feare, betwixt the two ſhores there is nothing (neither in the going in, neither within in the bay) that can hurt you, if you doe not ſayle upon the ſhore. When you ſhall be come in, ancker where you pleaſe in five ſix, ſeven, or eight fathom, ſo ſhowld or deepe as you will, on the north ſide within the bay ſtands a little Caſtle.

Mack-ſwynsbay.

About a little league to the eaſtwards lyeth another Bay within ſome rocks, called Mackſwynsbay, but it is not to goe in, except men be very wel acquainted, they muſt go betwixt the rocks in untill they bee gotten in, there they may ſave a ſhip without cable or anckor.

A great league to the ſouthwards of Kilbegh, lyeth along lying out poynt, called S. Johns poynt. Right weſt from that poynt, a quarter, or a little halfe league, lieth a great Rock under water, whereupon the ſea breaketh with great noyſe. Betwixt that rock, and the point of S. Johns point, men may ſayle baldly through, it is there cleane and cleare.

S. Johns poynt.

About 2 great leagues to the eaſtwards of that foreſayd point S. Johns point, lyeth the Haven of Dungall, into the ſouthwards. For to ſaile in there, you muſt firſt ſhun the eaſter ſhoare, which is very foule with dry plates and Rocks. When you are come right againſt a little caſtle that ſtandeth on the north ſide, right againſt it lieth of a little riffe from the ſhoare that you muſt avoyd alſo. And when you are come about the point of that riffe, you muſt goe over again to the north ſide, for the ſouth ſide is there flat and ſhowld. Betwixt Saint Johns point and Dungall-haven alongſt the coaſt is all over good anckor ground.

Dungall-haven.

The Haven of Moy hath at the comming in a broad bay, in it lye ſome rockes. For to ſayle in there, you muſt leave them all on the weſt ſide, that is, on the ſtarboard ſide, & run towards a little ſandy Iland, that hath at the north end a little riffe, you muſt goe into the weſtwards of it, and leave that Iland on the larborad ſide. Even within that foreſayd Iland lieth another little round green Iland, that muſt be left on the ſtarboard ſide, ſo ſoon as you ſhal be right againſt it, you muſt let fall your anckor, for a litle further it is ſhowld & hard ſandy ground, the greateſt anckor muſt be brought towards that foreſayd long ſmall Iland, & the ſmall anckor towards the litle greene Iland, it falleth there at low water allwayes dry. If you will goe from thence before the Town Moy, you muſt light your ſhip to 8 foot, for to come through betwixt the long ſmall Iland, and the S. grounds, there is at high water with an ordinary tide no more then 9 foot water; being come over the neck, you ſhall come into a poole before the towne Moy, there you may ride a float at low water. In the road againſt the Iland it is 15 or 16 foot deep.

Moy.

The Stagges of Broad haven are Rockes that lye to the northwards a league or a league and a halfe at ſeaboard of the point, to the northwards of Broad-haven.

Staggs off Broad haven.

Broad-haven lieth in S. and by weſt, in the ſound lye 3 or 4 rocks, theſe muſt be left on the larboard ſide, & runn in there alongſt to the weſtwards, until you come within the haven.

A great league to the weſtwards of Broad-haven lyeth an out point S. W. from the Staggs. From thence lyeth the coaſt alongſt to black-rock S. S. W. Black-rock is a great high black-rock with more other rocks by it, and lyeth from the foreſayd point S. S. W. diſtant about 6 leagues, & about a leag. northweſt from the out point Acklehead.

Black rock

Acklehead is a very high poynt, and ſheweth it ſelfe a farre off like an Iland with a great Saddle, thereby it is good to be knowne. Within this poynt lye alſo 2 exceeding high hills, which together with the poynt men ſhall ſee firſt at ſea before any other part of the land, ſo that the poynt doth ſhew it ſelfe firſt like three Ilands. Men may ſayle through betwixt Acklehead and Black-rock; comming from the ſouthwards men doe leave Acklehead on ſtarboard; and blackrock (with the rocks thereby a ſeabord) on larboard, and the courſe lieth through betwixt them both northnortheaſt and north and by eaſt unto the poynt of Broad-haven, it is there large and wide.

Acklehead

To the N. wards & to the E. wards of Acklehead, lie divers havens, where it is good riding, a little to the N. wards of Acklehead, you may run into the W. wards, betwixt the low land to the N. wards on the larboard ſide, and the high land of Acklehead on the ſtarboard ſide, a great wayes in, and anckor in 7 and 8 fathom, landlockt for all winds, and from thence may come out againe to the N. wards, or elſe may come out into the ſea again to the S. wards round about the land of Acklehead.

From Acklehead to Sleynſhead (by the ſeafaring men called twelve-pence, becauſe the land doth ſhew it ſelfe in 12, round hommocks) the courſe is ſouth and by eaſt 10 leagues, betwixt them both lye three Ilands before a great bay, the northermoſt or next to Acklehead is called Cleere, this hath a high hill on the N. end that is very ſteepe, & at the ſouth end it is flat going downe. The ſecond or middlemoſt is called Boche, within it is a road for thoſe that are bound to the S. wards, where men may anckor in foure fathom: The ſouthermoſt is called the Horſe.

Sleyns-head Twelve-pence.

Betwixt Acklehead and Twelve-pence lyeth within in the land, a very high hill like a Sugerloafe, called S. Patricks-hil, or by ſome Don Patrix, that may be ſeen far at ſea and ſhall bee ſeene long, altering it ſelfe by the cliffe land, as men ſayle long the coaſt to the northwards, or to the ſouthwards:

Patricks-hill.

From Sleynſhead, or Twelve-pence unto the ſound of S. Gregories, before the bay of Galloway, the courſe is S. E. nine leag.

Before the bay of Galloway lye 3 great Ilands, called the

Ylands of Aron.

Ilands of Aron, the northermoſt is greateſt, the channell betwixt the northermoſt and the middlemoſt, is called the ſound of S. Gregory, which is on both ſides cleane without any foule ground, ſo that men may turne in to and againe from the one Iland to the other, without feare of taking any hurt. The N. ſide of the middlemoſt Iland is nothing elſe but faire ſteep rocks: when you are come within the Ilands, you muſt ſhun the middlemoſt, becauſe of a little riffe that lyeth of it.

S. Gregories ſound.

Men may alſo ſayle to the northwards of the northermoſt Iland, into the great Bay off Galloway, likewiſe alſo to the ſouthwards of the ſouthermoſt, to wit, through betwixt the ſouthermoſt Iland, & the maine land, but that Iland is foule at the ſouth end of it, & therefore you muſt run in alongſt cloſe by the ſorth ſhoare, or at leaſt leave two third parts of the channell towards the Iland, as well in ſayling in as ſayling out.

Black head

Somewhat within the Ilands, on the ſouth ſide lyeth a high black point, called blackhead, you muſt beare into it, & alongſt by it in, whether you come in at the ſouther channel, or through S. Grigories ſound, or elſe in at the norther channell, for the north ſide of the bay is foule and rocky. About 2 great leagues N.E. from Black-head, lyeth an Iland, called Motton-Ile, under it on the E. ſide you muſt ankor in a poole, in 5 or 6 fathom.

You cannot ſayle further up to the northwards into the River with ſhippes, but onely with boats. A northeaſt and S. W. moone maketh there full ſea, and it floweth there ſo ſtrong in the baye, that the rockes which at low water are above water; at high water you may ſayle over them; at low water the ſpring-tydes, the grounds fal dry W.S.W. from Motton Ile, a great league and halfe off, moſt all rocky and foule ground.

Motton-Ile.

When you ſayle from Blackhead towards Motton-Iland you muſt take heed of the north-ſide, and edge over moſt towards the ſouth ſide. About halfe wayes betwixt them both, lyeth a plate or ledge neareſt the north ſide, you muſt goe in alongſt by it to the ſouthwards.

Lupishead

From the Bay of Galloway to Lupiſhead, the north poynt of the haven of Limbrick, the courſe is ſouthſouthweſt nine or 10 leagues. About halfe wayes betwixt them both, lyeth a litle Iland that is foule round about with ledges of Rocks that lye of to ſeawards a league and a halfe a ſeaboard the land.

Haven off Limbrick Seatrick.

To the ſouthwards of the point Lupiſhead goeth in the Haven of Limbrick. Three or foure leagues eaſtnortheaſt within the foreſayd poynt, lyeth an Iland, called Seatrick, you muſt ſayle alongſt without in to the ſouthwards, & leave it on the larboard ſide in ſayling up. At the eaſt ſide off that Iland is a good road. About halfe wayes betwixt that Iland and Lupiſhead, lyeth a ſhowld which you muſt ſhun, & ſayle alongſt to the ſouthwards of it. From the Iland Seatrick unto Limbrick, are more 12 or 13 leagues, firſt from thence to the Iland Quoine 4 or 5 leagues there are two litle Ilands, you muſt ſaile cloſe alongſt to the northwards of them: from thence E. N. E. unto a great rock, called the great Beefe, and then ſoutheaſt unto another great rock, called the little Beefe.

The great and little Beefrocks.

When you are come before the towne in the Haven, you muſt make faſt on the Caſtle with three or foure Cables, for there goeth a very ſtrong tide as well of flood as of ebbe. An eaſtnortheaſt Moone maketh there full ſea.

From the Haven of Limrick to the haven of Smerrick the courſe is ſouthweſt ſeven or eight leagues, betwixt them both lieth the coaſt with a great Bay, wherein lie ſome litle Ilands, called the Hoggs.

A litle to the eaſtwards of Smerrick lieth Sinbrandonhil, a very high hill, which lieth in height very much above all other lands thereabouts, they that come out of the ſea from the weſtwards, ſhall ſee that hill firſt before any other land, and therby eaſily know it. Men may ſee at ſea in the offing, 12, 14, and ſometimes 16 leagues off, according as the weather is cleare.

Foure leagues weſtſouthweſt from Smerrick, a litle off from the land lye 4, or 5, Ilands, being high round Hills and rocks, called the Blaskeys, with ſome other rocks and little Ilands about them. The Sound betwixt them and the maine land, is called the Sound of Blaskeys, lyeth through neareſt N.W. and S.E. Hee that is bound to the Northwards, may ancker at the ſouth ſide before the ſound for weſterly and northerly winds, and not be in-bayed upon no lee ſhoare: For of the winde ſhift eaſterly, hee may either goe through the ſound, or elſe goe about a Seaboard the Blaskeys. If the wind ſhift weſterly or ſoutherly, he may run through the Sound, and further his voyage. There runneth through a very ſtrong tyde, as wel of the flood as of the ebbe which muſt be conſidered.

Of the tydes and courſes of the Streame.

In the haven of Loughfoile an eaſt and by S. and weſt and by north Moone maketh ful ſea. The flood commeth there out of the weſt and northweſt.

At the Ilands Eneſterhull, and in sheepeshaven an eaſt and weſt Moone maketh full ſea. The flood commeth there out of the weſt.

In theſe other foreſayd Havens and roads an eaſtnortheaſt and W. S. W. Moone maketh full ſea, In the offing a ſeaboard a ſouthweſt and N. E. Moone.

Courſes and diſtances.

From Loughfoyle to the Ilands Eneſterhull northweſt, ——	4 or 5 leagues
From Eneſterhull to Lough Swilly ſouthweſt, ——	5 leagues
From Lough Swilly to Sheepeshaven W. S. W. weſterly,	4 or 5 leagues
From C. de Horne, or Hornhead, to the Iland Tore weſtnorthweſt	2 leagues
From the Iland Tore to the Iles of Aran S. VV. and by S. ——	6 or 7 leagues
From the Ilands of Aran unto Telhinghead S.S. VV. ——	8 or 9 leagues
From C. de Tellin or Tellinghead to Kilbegh eaſtſoutheaſt ——	4 leagues
From C. de Tellin to the Stagges of Broadhaven ſouthweſt -	11 leagues
From the poynt of Broadhaven to Blackrock ſouthſouthweſt	6 leagues
From Black-rock to Acklehead ſoutheaſt ——	1 league
From Acklehead to Sleynshead ſouth and by eaſt ——	10 leagues
From Blackrock to Rokoll N. and by VV. ——	60 leagues
From Sleynshead unto the Bay of Galloway, S.E. ——	9 leagues
From the Bay of Galloway of Lupishead the N. point of Limbrick haven ſ.ſ.w. 9 or 10 leagues	
From Lupishead to Smerrick S. VV. ——	7 or 8 leagues
From Smerrick to the Blaskeys VV. S. VV. ——	4 leagues
From Sleynshead to Sinbrandonhill ſouth and by weſt, ——	22 leagues
From the Bay of Galloway to the Blaskeys, ſouthweſt and by ſouth	23 leagues

Heights.

The Ilands of Eneſterhul at the northermoſt point of Ireland lyeth in 55 degrees and 10 or 12 minutes

The River of Galloway lyeth in —— 53 degrees 10 min

How theſe Lands doe shew themſelves at ſea.

Kilbegh.

The Iland betwixt Kilbegh and the poynt of Slego.



The high hommock upon the point of Slego.

Theſe two figures belong at the AA, one to the other, and shew the forme or likeneſſe of the land betwixt Kilbegh and Slego.



Thus sheweth the Land to the eaſtwards of the Saggs of Broad-haven towards Moye and Slego.

Staggs

The entrance of Broad-haven.



The land to the northwards of Blackrock, as farre as the Stagges, and then to the ſouthwards alongſt paſt S. Patricks hill, sheweth, as in theſe two figures is deſcribed, when men are thwart of Blackrock.

Thus



Thus sheweth the land betwixt Blackrock and Ackelhead, when it is eaſt from you, when you come more to
Blackrock. the northwards, theſe high hils doe alter alſo wider one out of the other.



The poynt of Blackrock sheweth thus, when you are to the northwards of it.



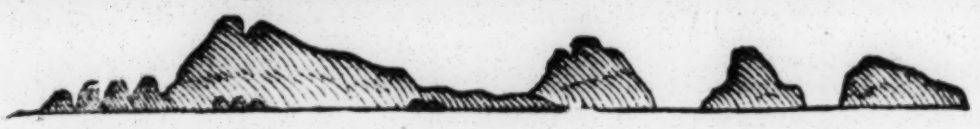
Thus sheweth the poynt of Blackrock, when men are to the ſouthwards of it,
then they ſee a sharpe rocke over the poynt.

Don Patrick or Patrickshill.

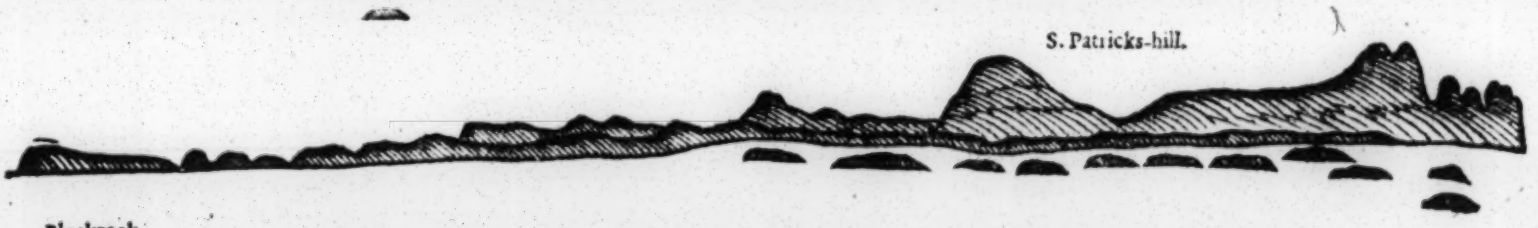


Thus sheweth S. Patricks hill, when it is S. E. and by S. from you, being not farre from Land, at the N. ſide of it lye ſome little Ilands and rocks.

S. Patricks hill.



S. Patricks-hill.



Blackrock.

Thus sheweth the ſecond poynt to the northwards of Blackrock, lying in the height of 54 degrees and a halfe.
The Ilands, as alſo the maine land by north and by ſouth the Bay of Galloway, shew, as you may ſee in theſe 5 following
Figures, when as you are right before the Ilands of Aron, which lye before the Bay of Galloway.



North being 8 leagues from you N.N. E. 10 leagues.

Theſe 4 following figures belong one to the other, as the markes doe shew:



N.N.W. 6 leagues the maine Land by N. Galloway. N. 3 leagues.

Betwixt theſe two Ilands, it is 20 fathom deepe.



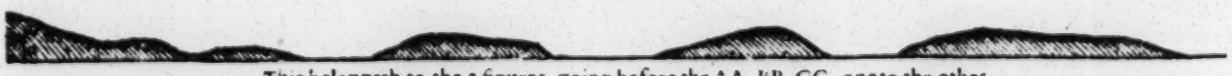
A B

The 3 Ilands of Aron before Galloway.

B E. and E. and by north 4 leagues. E. and E.S.E.



S. E. and by S. 7 leagues. S. S.E. 8 leagues S. and by E. 9 leagues.



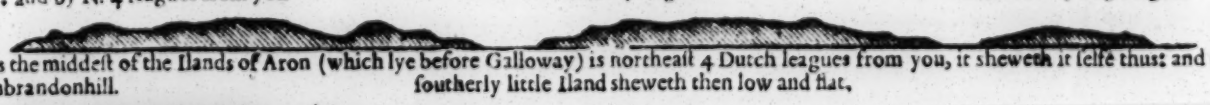
This belongeth to the 3 figures, going before the AA, BB, CC, one to the other.

N.N.E. 4 leagues East 5 leagues E.N.E. 6 leagues Being 8 leagues N. E. and by E. from you.



Thus sheweth the land on the Ilands betweene the Lemrick and Galloway, when as you come out of the ſea.

Being N.E. and by N. 4 leagues from you N.E. 4 leagues N.E. and by E. 5 leagues



When as the middeſt of the Ilands of Aron (which lye before Galloway) is northeaſt 4 Dutch leagues from you, it sheweth it ſelfe thus: and that
C. Kerry, or Sinbrandonhill. ſoutherly little Iland sheweth then low and flat.



A

Blaskeys.

The land of C. Kerry, or Sinbrandonhill (by ſome called Devels hill) unto the Blaskeyes, lying N.E. and by E. 5 or 6 leagues sheweth, as is pictured
out in theſe two figures, when the foreſayd hill of Sinbrandon is E.S.E. from you three or foure leagues.

Ilands to the northwards of the Blaskeys A Channell Sound of Blaskeys.



Blasques. Blasques. The Blaskeys.



S.S.E. being 2 leagues and a halfe from you.

The Blasques being S.E. and by S. 3 leagues from you, sheweth thus.

Out-rock.



Southeaſt 3 leagues from you

The higheſt rock of the Blasques, being two leagues eaſt and by ſouth from you, sheweth thus.

The

The ſixth Demonſtration,

Where in the coaſt of Munſter, betweene Blaſques and Oldhead, and the ſouth coaſt of Ireland, from Oldhead to Waterford, are ſet forth.

Skellocks.

SEven or eight leagues to the ſouthwards of the Blaskeyes lye three great Rockes called the Skelloks, the eaſtermoſt about a league, and the weſtermoſt two great leagues a ſeaboard the land, when you come from the ſouthwards and ſee them firſt, they ſhew like ſayles of ſhips. Betwixt the Skellockes and the Blaskeyes goeth in a great broad Bay deepe into the land, called Dinglebay, with divers havens in it.

Dingle-bay.

About a league and a half from the Sound off Blaskeys lyeth a haven called Ventrie, a great league to the eaſtwardes of it another called Dingle, or Dingle Couch, it lyeth north and by weſt in at the weſt poynt of it lyeth a rocke, called the Crow,

The Crow

which is clean round about, ſo that men may ſayle round about it on both ſides, within taking any hurt, at high water with ſpring tyde, it floweth even under water. This haven of Dingle and the Skellockes, lye northeaſt and by north, and ſouthweſt and by ſouth diſtant eight leagues.

Begenny Haven.

Northeaſt from the Skellockes, ſoutheaſt from the Sound of Blaskeys, and ſouth and by eaſt from the Ventrie, lyeth a haven at the eaſt end of the Iland Valentia, called Begenney, which lyeth eaſtſoutheaſt in, you muſt give the eaſt poynt of the Ilands a Birth off, becauſe it is fowle, and lyeth a good wayes off: there lyeth alſo a ſuncken rock on the Iland ſide, which you muſt take heed of when you are come within the entrey of the haven, you muſt goe eaſt and by north unto the road, which is right againſt a red cliffe that lyeth on the ſouth ſide.

The Skellockes and the Cape Dorſey lye northweſt and ſoutheaſt, ſeven or eight leagues a ſunder, betwixt them both goeth in alſo a great broad Sounds, northeaſt in, wherein lye many Ilands, haven and roads.

C. Dorſey.

C. Dorſey is an Iland within which men ſayle and ryde under. For to goe in there from the ſouthwardes, you muſt, give the eaſt ſide a birth, that is, the ſide off the maine land which is fowle, and run in alongſt by the ſide of the Iland, untill you be come within, anckor there.

Bull Cow and Calfe rockes.

Without the Cape Dorſey lye three great rocks, the outermoſt or the weſtermoſt is called the Bull, the middlemoſt is called the Cow, and the other the Calfe, they are clean round about, ſo that men may ſayl there through between them, without feare of any danger, there is nothing that can hurt but men may ſee it.

Mizanhead

About ſeven leagues eaſtſoutheaſt from C. Dorſey lieth the poynt Mizanhead, betwixt them both goeth in a great Bay or river deepe into the land (with divers havens and roades) called the Bantry.

Three Caſtles.

A great league to the northwards off Mizanhead, lieth a poynt, called the three Caſtlehead, upon it ſtandeth three flat Towers, but men kan hardly ſee them Except they be neere the land. Alſo a great league more to the northwardes,

Sheeps-head.

lyeth a ſmall point, called Steepſhead. Betwixt theſe two points goeth in a great broad Bay, called Dounams Bay, there is nothing to doe nor to fetch, but it is a fit place too ſave ſhips, and all over good anckor ground.

Beerhaven

From Sheephead to Beerhaven, the courſe is north and by weſt, or ſomewhat weſterly about two great leagues, it goeth in between an Iland on the eaſt ſide, and the main land towards. C. Dorſey on the weſt ſide, it is about a great muſket ſhot broad, the foreſayd Iland on the eaſt ſide is called the Iland of Beer-haven and is about two leagues long. For to ſayl in there you muſt keep the mid way, in the entry of the haven it is clean, without any fowle ground: after you be come in, there ſtandeth on the larboard ſide a ruined caſtle, and a little further are two little rivers, cloſe one by the other, between

Road in Beerhaven

theſe 2 little rivers ſtand ſome Fiſherhouſes. Men may ſayle into the foreſaid little rivers, they are deepe enough, but commonly men doe anckor before them, or by that foreſayd ruined caſtle, or els ſomwhat further in, it is all over good anckoring, and cleane ground, except right againſt the foreſayd little rivers, lye ſome rocks about the middle of the channell, which at high water are under, and at low water lye above water, theſe onely muſt be ſhunned, but men may goe on either ſide off them. Somewhat further in the Bay ſtandeth another caſtle, called Oldcaſtle, from thence men may ſayle alongſt too the northwards off the Iland Beer-haven, and come tou to the eaſtwardes into Bantry. The Sound on the north ſide off the Iland is large, broad and cleane, 13, 12, and tenne fathom deepe. The eaſt poynt of the Iland is a ſharpe poynt, and very fowle, there lyeth off a ledge off rocks, where off ſome lye under water, and ſome above water at low water, but the ſide of the mayne is cleare and cleane. In this entry lye alſo two great rockes high above water, but clean round about, men may run through between theſe rocks, or to the ſouthwards, betwixt them and the foreſayd ledge of rockes, or alſo to the northwards alongſt betwixt them and the mayne land, as well in comming in as in ſayling out, there is no danger more then men may ſee.

The Whiddy.

From Beerhaven to the north poynt of the Iland Whiddy, lyeth the Bantry eaſtnortheaſt and northeaſt and by eaſt 6 or 7 leagues: over againſt Beer-haven in the middeſt in the fareway, it is deepe 40, 36, and 30 fathom, within the Iland, 15 and 16 fathom, but further in towards the Iland Whiddy, it is againe 20 and 25 fathom deepe: men may ſayle round about the Iland Whiddy, (which is about a league long) but to the northwards it is beſt.

For to ſayle in about to the northwards, or to the eaſtwardes, men may goe in cloſe by the north or eaſt point, but a litle within the point, lyeth a little ledge of rockes, a little muſket ſhot off from the ſhore, which at high water lyes under, but a halfe ebbe beginneth to come above water, that onely is there to be ſhunned, being paſſed that, you may anckor all over. About that foreſayd poynt lye two ſmall Ilands, by the greater men may ſayle alongſt on both ſides off it, either within it or without it, untill before a Gentlemans-houſe which is white, upon the Iland Whiddy, and anckor there againſt it in 3 or 4 or 5 fathom, ſo deepe or ſo ſhould as men will, according as men deſire too ride neere or far from the ſhore, it is there all over clean ground,

For to ſayle in to the ſouthwards off VVhiddy.

He that will ſayle into the ſouth poynt of the Whiddy, had need be very well acquainted it is there to the ſouthwardes betweene the Whidday and the maine land, at moſt placed fowle and ſtony. From the weſt ſide of the Whiddy, ly alſo ſome fowle ground and rocks, ſomewhat off the Iland to ſeawards, ſome above, and ſome under water.

The Abby.

To the ſouthwards of the Whiddy upon the maine land, ſtandeth a Friery or Abbey, called by the Iriſh the Abbey, right againſt it is the common road, & it is very good ground in 4, 5 or 6 fathom, according as you ſhall ride farre or neere to the ſhore, to the N. wardes lyeth a litle Iland ſo low in the middeſt, that at a ſpring tide the ſea floweth over, & divideth it in two.

A little league to the eaſtwards of the Abbey lyeth a little towne upon a little river called Balgobben, at high water men may goe up ther with ther boat, but at low water it falleth dry.

Langerf.

A great league from the eaſt poynt of the Whiddy, weſtnorthweſt, lyeth a haven called Longerf, when you ſhall ſayle from the foreſayd poynt towardes it, you ſhall meete right in the fareway, about halfe wayes over a great rocke, which men may be ſayled about on both ſides, but it is beſt on the off-ſide. The off-ſide is cleane and cleare, but on the inner-ſide lyeth ſome fowle ground. He that will ſayle through on the inner-ſide, had need to be very well acquainted. The foreſayd haven of Lang-erf lyeth N.N.W: Even within it in the entrance on the ſtarboard ſide, lyeth ſome fowle ground, which at low water (the Spring tydes) may be ſeen drye, theſe muſt be ſhunned, or els it is there within all over good anckoring & good ground, there is no more danger, but men may ſee it.

When a man is neer the Iland Whiddy, about middeſt of the Bay, he cannot ſee the land without the Iland Beer-haven on the weſt ſide of the Bay, becauſe it falleth a way ſo alongſt to the weſtwardes.

Crooke-haven.

From Mizanhead unto C. Cleare, the courſe is eaſt and by ſouth diſtant ſeven leagues. About three leagues within or to the eaſtwards of Mizanhead, northweſt from C. Cleare, lyeth a haven called Croock-haven. He that commeth from the eaſt, and is bound in there, muſt runne alongſt by C. Cleare, up about it to the northwards, ſo farre untill hee may ſee through into ſea to the northwards of the Iland of C. Cleare, as through a hole, and ſet then his courſe weſtnorthweſt, keeping that foreſayd hole (to the northwarde of C. Cleare) open, then hee ſhall fall right with Crooks haven.

Duytsche mylen 15 in een gr
Spaensche mylen 17½ in een
Eng: en Fran: mylen 20 in een

C. Minet
I. Rijs
Dingler Bay
Blasques
Rocken
Damkeryn
Clypgats een Zeyl
mare
Kil
Sandplaat
Middel Schylingh
Groot Schylingh
Sternoij
Schyf
Mons
Dorssen
Scudeins Dorssen
Kalf
Bul
Kat

Lieues d'Allemagne 15 en un degre

Lieues d'Espaigne 17½ en un degre

Lieues Angl. et Franc. 20 en un degre

De Zuydwest hoeck van Yerlandt tusschen de Blasques en Oldefied.

Glandore

Oldefiedt

Bigle

Smerwick

Longfs haven

Baltimore

Bantery

Mayhowe

Cort

I. Spirk

Monke

Castelhaven

Creek

Kinsale

Corck

Spana

Prus

Longisland

Skeu

Blaies

Clere

Clogher

C. de Clare

Dru Castelhad

Mayenhead

Creek haven

Limerick

Tarbert

Cancar

Dru Nay

Schotshd

Fastnet

De Zuydcust van YERLANDT tusschen Oldhooft en Waterfoord.

ZVYDCVST VAN

Les Costes d'Yerland Entre Les Blasques et Waterfoord

Corck

Kinsnel

Sandbay

Corkbeg

Oldeberg ofte Oldhooft

S T

Y E R L A N D T

Duytsche mylen 15 in een graedt — Lieues d'Allemaigne 15 en un degre

Spaensche mylen 17½ in een graedt — Lieues d'Espangne 17½ en un degre

Eng. en Fran. mylen 20 in een graedt — Lieues Angl. et Franc. 20 en un degre

Dunqarvan

Iochul
Iouchal

Ardimore Castel

Ardimore point

C. Dreet

Waterfoord

Strangmore Bay

Crookpoint

XXXIV

BIBLIOTHÈQUE
DIJON
MUSÉUM

haven, which lyeth in weſtſouthweſt. And there he may anckor before the litle town in three fathom, and two fathom and a halfe. It was wont heretofore to be deeper there, but it is ſpoiled moſt by caſting of ballaſt, men may alſo anckor further out then before the towne, there it is deeper, and all over cleane ground.

Faſtney-rock. Two little leagues weſt and by ſouth from C. Cleare, lyeth a high ſteepe rock alone in the ſea, called Faſtney, which sheweth at firſt ſight like unto a ſayle, north and by weſt 3, or 4 leagues, from this rock lyeth a haven, called Schoolhaven.

Schoolhaven.

Ile Sherck. A little to the eaſtwardes off the Iland off Cape Cleare lyeth another Iland, called Ile Sherck. To the eaſtwards off it, betwixt that Iland & the maine land goeth in a haven called Baltemoore haven: It is ſomewhat narrow at the mouth of the haven, but within the mouth off the haven it is large and broad, there may you anckor on both ſides wheare you will, and lye landlockt for all windes. On the weſt ſide within the haven ſtandeth a Friery, cloſe before it you may anckor in five and ſixe fathom; in the middeſt off the haven, it is ſixe and ſeven fathom deepe. A little to the northwards of the foreſayd Friery ſtandeth a caſtle upon a point. In the mouth of the haven lyeth a ſuncken rock, neereſt to the eaſt ſide, and within in the middeſt of the haven lyeth a rocke, which at high water lyeth under, and at low water lyeth above water, there is nothings els that can hurt. A little to the eaſtwards without the haven, lyeth another rock 6 or 7 ſhipps lenghts from the ſhore.

Baltemore Haven.

For to ſaile through within the Ilands off C. Cleare. To the northwards of the Iland of the Ile Sherke, men may goe to the weſtwards through betwixt Ile Sherke, and the Iland Spain, and come out againe into ſea by C. Cleare, but it is to bee done onely with ſmall ſhipping, and yet not without danger. Betwixt Ile Sherke and Spain, is at halfe flood not more then twelve or thirteene foote water. At divers other places betwixt theſe Ilands, it is rocky and ſhowld, ſo that it is not good to goe through within, except men be very well acquainted, and yet at high water and ſpring tydes.

Stagges. A litle league to the eaſtwards of Baltemoore lye the Stagges, an Engliſh mile from the ſhore, they are five or ſixe high ſteepe rocks. When men come from the eaſtwards alongſt by the ſhore, and get firſt ſight of them, they are like unto ſome ſpirie towers together, men may ſayle through betwixt them and the maine land, it is there large and broad enough.

Caſtle-haven. Northeaſt about two leagues from the foreſayd Stagges, lyeth Caſtle-haven without it on the eaſtſide lyeth a litle Iland, you muſt leave it on ſtarboard ſide in ſayling in, and another little flat Iland on the ſtarboard ſide, that lyeth ſo cloſe to the land, that at low water men may goe dry foot over from it to the maine land. Within the haven ſtandeth a little Chappell, when you will ſayle in there, you muſt runne in right with it, cloſe alongſt by the foreſayd little Iland on the eaſt ſide: when you are come in, thwart of the Chappell, you ſhall ſee a Caſtle on the weſt ſide, over againſt that Caſtle you may anckor in 12 fathom.

From Caſtle-haven unto the Oldhead, the coaſt lyeth moſt E. N. E. and W. S. weſt, but C. Cleare and the Oldhead lye N.E. and by eaſt, and S.W. and by weſt diſtant 13 or 14 leag.

Kendonetedo. About halfe wayes betwixt Caſtle-haven and the Old-head lyeth a high poynt, called by the Iriſh, Kedonetedo, there by it on the weſt ſide is a good haven, called Clandore: For too

Clandore. ſayle in there, you muſt run in alongſt cloſe aboard by that foreſayd high land on the eaſt ſide; for too ſhun a rane of rocks that lyeth on the weſt ſide, and lyeth off ſomwhat towards on the eaſt ſide, when you are come in, you may anckor before a Caſtle in five, or ſeven fathom.

The Oldhead or C. de Velho, is a poynt that lyeth out farre without the other land, the outermoſt ſouth end of it is very high & ſteepe, when you are come alongſt the ſhore from the eaſt or from the weſt, and ſee it firſt, it ſeemeth to bee an Iland, upon the top off it ſtandeth a ruined caſtle with three Towers, whereof the middlemoſt is the higheſt. On both ſides off this outlying poynt men may ankor ſo deepe or ſhowld as they wil.

Kinſale. About two leagues north and by eaſt from that poynt, lyeth the haven of Kinſale, lying in rorthnortheaſt, you may ſayle in there, keeping the middle off the channell, there is no danger, neither without not in the harbours mouth, but one ſuncken rock cloſe by the eaſt poynt. When you come in from the Oldhead, or from the ſouthwards, and you keep an old ruined caſtle (that ſtandeth within the haven on the eaſt ſide) even without the Innermoſt eaſt poynt off the haven, then you ſhall not come neere the rocke to take any hurt off it. About a great halfe league to the eaſtwards or the havens mouth, lye two great black rockes, the one ſomewhat further from the ſhore then the other. When you come from the eaſtwards, and you will goe in cloſe about the eaſt poynt, and you keepe the ſouthermoſt (that is the greateſt) right on the eaſt poynt, then you ſhall goe through betwixt the ſuncken rock and the point: but if you keepe the northermoſt (or the ſmalleſt) a little without the foreſayd poynt, ſo long untill you have brought the foreſayd old ruined Caſtle, without the innermoſt poynt, then you ſhall goe alongſt without it, and then in the midſt off the channell alongſt by the eaſter ſhore. A little paſt that foreſayd old ruined Caſtle, ſtandeth a Caſtle on the weſt ſide upon a poynt, there lyeth off a ſhowld, which muſt be ſhunned, and therefore you muſt keep cloſe alongſt by the eaſter ſhore, untill you be gotten about the ſhowld of the Caſtle, and then weſtwardes up unto the Kay of Kinſale, there you may anckor in eight or nine fathom, and lye landlockt for al windes. The towne Kinſale lyeth a little to the northwardes in a bay, where it is oaſie ſoft ground, part whereof falleth dry at low water.

Foure leagues too the eaſtwardes off Kinſale, lyeth the haven Corck, betwixt both about a league too the weſtwardes of Corck, you ſhall ſee (ſayling alongſt the coaſt) two ſteepe hommockes like Towers in the land, not farre one from the other: theſe are notable marcks for to know the coaſt. When you are thwart of the eaſtermoſt, you may ſee the havens mouth of Corck, that lyeth in northnorthweſt, within it is wide and broad, and goeth up into the land with a broad river. On the eaſt ſide, ſomewhat within is a poynt, where lyeth off a ledge off rocke, which muſt be ſhunned. There over againſt on the weſt ſide, ſomewhat farre in, lyeth another point with an old ruined caſtle, there alſo lyeth off a ſhowld; to the northwardes of it, men goe about to Corck. Within that Caſtle lyeth a litle tyde haven in a ſandy Bay. Within the haven lyeth an Iland, where men doe ſayle round about, and at the ſouth ſide thereof may ride. It is in this Haven of Corck at low water, ſeven, eight or ten fathom deepe.

Corck.

A little without the eaſt poynt ſtandeth an old ruined Caſtle upon the low land, and ſomewhat further eaſtward, a ſquare Tower in a valley. A league to the eaſtwards off the havens mouth ſtandeth a Tower upon a high poynt, cloſe to the water ſide, with ten or twelve thatch houſes by it Moreover, a league further eaſt, by a ſmoot poynt, lyeth a long rock growen about with greene, upon the eaſt ſide off that poynt ſtandeth a flat tower, Further, it is to the eaſtwards all lowe land, unto the poynt of Jochul.

Foure leagues to the eaſtwards of Corck-haven lieth an Iland, called Ballecotton, within it men may ride for weſterly & ſoutherly windes, in foure, five, or ſix fathom. Corck and Iochull lye E.N.E. and weſtſouthweſt, diſtant 7 or 8 leagues.

Bellecotton Ile.

Iochull. The haven of Iochul is a broad haven, where men muſt goe in at high water, by the eaſt lant it lyeth in northw. and northweſt and by north. The weſt ſide is a ſandy ſtrand alongſt to the towne.

Chappell-Ile. About a league ſouth and by weſt from the havens mouth of Iochull, lyeth a little Ilands called Chappell: under it on the eaſt ſide is a good road. He that commeth before Iochul at a low water, may goe under that foreſayd Iland to ride there, and ſtay for the laſt quartier flood, then there is foure fathom water upon the banck. At the weſt poynt of the Havens mouth lyeth a rocke within it. About halfe wayes to the towne ſtandeth a friery, before it men may ride they may alſo edge over to the eaſt land, and then run up the river. Within it is three, foure and five fathom deep. From the eaſt ſide lieth a rane of rockes, at leaſt halfe wayes over in the havens mouth, a little without the rocks it is at low water no more then five or ſixe foot water, but a high water it is deepe enough.

Foure leagues to the eaſtwards of Iochull, lyeth Dongarvan haven, betwixt both lyeth an out point; a little to the eaſtwardes of it ſtandeth a high blacke Tower, called Ardimore, which may bee ſeen wel 4 leagues at ſea, within is a bay, which is a good road for weſterly windes in ſeven or eight fathom.

Ardmore.

Dongarvan. Dongarvan is narrow tyde-haven, the mouth off the haven is ful of rockes, and at low water it falleth drye, men muſt goe in there at high water, and runne in through betwixt the rocks, it lyeth in northnorthweſt, within it is deepe enough. The towne Dongarvan lyeth upon the weſt ſide of the haven. From Dongarvan to Waterford are eight leagues.

Within Dongarvan, northnorthweſt landwards in, lyeth the mountaine of Sleges, which men doe cal the high mountaine of Dongarvan, or Cape de Quin, or Caray Quin, it ſheweth it ſelfe with three exceding high hommockes, farre above all other lands, thereabouts men may ſee it at ſea alongſt a great part of the ſouth coaſt of Ireland.

C. quin.

When you ſhall have that mountaine northnorthweſt from you, and ſayle in right with it, you ſhall fall right with Dongarvan.

When you ſhall have it north off you, and ſayle in right with it, then you ſhall fall with Iochul; being northnortheaſt, then you ſhall fall with Corck, but when it ſhall be N. W. and ſo run in, you ſhall fall with Waterford.

Of the Tydes and Courſes of the ſtreames.

In all theſe foreſaid Havens maketh high water an E.N.E. and W.ſouthweſt Moone, or a poynt later, according as they lye deepe within the land.

But a ſeaboard the coaſt in the offing, a northeaſt and ſouthweſt Moone.

At the Mizanhead, C. Cleare, and the coaſt to the eaſtwards, a W.S.W. and E.N.E. moon maketh high water, within the Havens and in a draught, a point later, to wit, eaſt and by N. and weſt and by ſouth. But in the channell a ſea-board the land, a N. E. and ſouthweſt moone.

Without C. Cleare by the land, the flood falleth away E. and the ebbe weſt, but to the eaſtwards of C. Cleare E.N.E. and weſtſouthweſt.

On theſe ſouth coaſt of Ireland an eaſt and N. E. and VV. S. VV. Moone maketh high water, within the Havens a poynt later, to wit, an eaſt and by north, and weſt and by ſouth moone: but in the offing a ſea-board a ſouthweſt and northeaſt moone.

Betwixt C. Cleare, along the Coaſt before VVaterford, into the poynt of Carnaroort, the flood falleth alongſt the coaſt eaſtnortheaſt and the ebbe weſtſouthweſt.

Of the Depths.

Betwixt C. Cleare and the Dorſeys, men may ſee the land in 58 and 60 fathom.

From C. Cleare to the eaſtwards unto Waterford, men may ſee the land in 54 fathom. The moſt part of the S. coaſt of Ireland, men may ſee it in 35 and 40 fathom. In 35 fathom you ſhal not be farre from the land. Therefore come no neerer Ireland by night then in 40 fathom.

Courſes and diſtances.

From the Sound of Blaskeys unto the Skellocke, the courſe is ſouth	7 leagues
From Dinglehaven unto the Skellockes, ſourhweſt and by ſouth	8 leagues
From the Skellockes unto the Dorſeys, ſoutheaſt	7 or 8 leagues
From the Dorſeys to Mizanhead eaſtſoutheaſt,	7 or 8 leagues
From Mizanhead to Sheepeshead north	two great leagues
From Sheepeshead to Beerhaven, the courſe is north and by weſt, ſomewhat weſterly, ſcarce	2 leagues
From Mizanhead to Beerhaven north and by weſt	5 leagues
From Beerhaven to the Iland VVhiddy, the courſe is E.N.E. and northeaſt and by eaſt	7 or 8 leagues
From the Dorſeys to Silly ſoutheaſt and by eaſt	56 leagues
From the Dorſeys to Cape de Finiſterre is the courſe ſouth and by eaſt and ſouth	173 leagues
From Mizanhead to C. Cleare eaſt and by ſouth diſtant,	7 leagues
From C. Cleare to Croockhaven N. VV.	5 leagues
From C. Cleare to C. Veelo or Oldhead eaſtnortheaſt,	13 leagues
From C. Cleare to the Landſend off England ſoutheaſt and by eaſt	53 leagues
From C. Cleare to Silly ſoutheaſt	47 leagues
From C. Clare to C. de Finiſterre ſouth	173 leagues
From Oldhead, or C. de Velho, to the haven of Kinſale, is the courſe north and by eaſt	2 leagues
From Oldhead, or C. de Velho to Corck northeaſt and by eaſt	5 leagues
From Gorck to VVaterford, the coaſt lyeth moſt eaſtnortheaſt	
From C. de Velho to the Landes end of England ſoutheaſt	45 leagues

Heights.

C. Clear lyeth in	52 degrees, 12 minutes
C. de Velho, or Oldhead lyeth	51 degrees, 28 minutes

How theſe Lands doe ſhew themſelves at Sea.

Northnorthweſt. The land to the eaſtwards ſhwart of the Blasques.



The Blaskeys. Sound of Blaskeyes.

The Blaskeyes, and the land to the eaſtwards of them, doe ſhew themſelves thus, when you ſayle from the Skellocks towards them.

An entrance. Al double ragged land. The Skellockes.

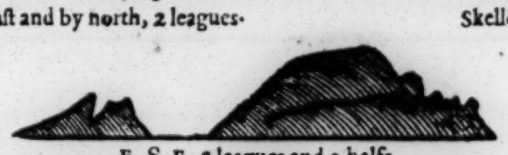


Thus ſhew the Skellockes with the land to the eaſtwards, or to the northwards of them, when you are ſomewhat to the northwards of them, and ſayle alongſt by them.



VVhen you are by the Skellocks, then the Ilands lying to the northwards and to the eaſtwards of them, ſhew themſelves thus.

Eaſt and by north, 2 leagues. Skellockes.



E. S. E. 2 leagues and a halfe.

The Skellockes, being eaſt and by ſouth from you 3 leagues, ſheweth thus.



This is an entrance.

Theſe Ilands lye to the ſouthwards and to the eaſtwards of the Skellockes, the land from thence eaſtwards towards the Dorſeyes, is all high broken and very ragged land,



The Iland lyeth betwixt the Skellockes, and the Dorſeyes cloſe by the land.



Thus ſhew the Dorſeyes, with the rocks, Bull, Kow, and Kalfe, which lye without them, they are to the ſouthwards of you.

A



A This and the figure following belong at the A A one to the other.



VVhen you are to the eaſtwards or to the ſouthwards of Dorſeyes, they ſhew as is pictured out in theſe 2 figures here before.
The eaſt end at B ſheweth almoſt like Cape Cleare, being eaſt from you, but it is a higher land.

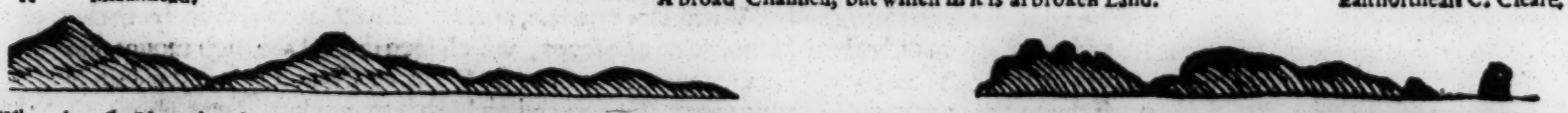
The Dorſeys Hilly and very ragged Land. Northweſt and by eaſt.

A



Theſe two figures belong one to the other at the A A.

A Mizanhead. A broad Channell, but which in it is al broken Land. Eaſtnortheaſt C. Cleare.



VVhen that C. Cleare is E. N. E. from you, and Mizanhead N. E. and by eaſt, then is the land unto the Dorſeys in theſe formes, as is ſheweth in theſe two figures here above.

The Dorſeys. Mizanhead northeaſt and by eaſt.



VVhen that Mizanhead is northeaſt and by eaſt about two leagues from you, then ſheweth the land to the northwards of it towards the Dorſeys. And then may you alſo ſee the Iland of C. Cleare eaſt from you,

The



The forme of C. Cleare with the rock Faſtney.

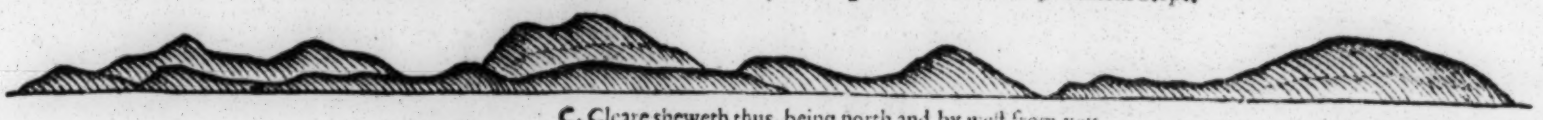


This belongeth to the figure going before the AA, one to the other, is the land to the eaſtwards of Baltemoore.

Rock a little to the eaſtwards of Baltemore.

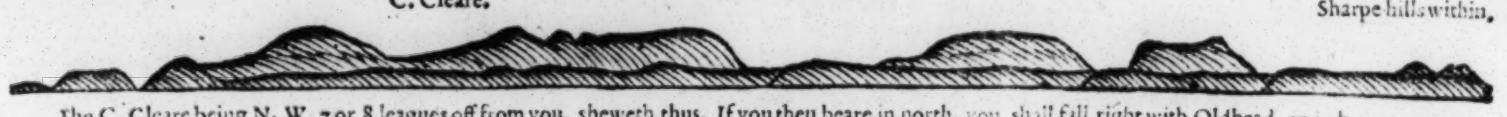


Thus sheweth C. Cleare, when it is north from you 5 leagues, and there it is 38 fathom deepe.



C. Cleare sheweth thus, being north and by weſt from you.

C. Cleare. Sharpe hills within.



The C. Cleare being N. W. 7 or 8 leagues off from you, sheweth thus. If you then beare in north, you shall fall right with Oldhead, and when you come neare the shore, you shall loſe ſight of the high land, and it shall ſeeme to be all low land.

Land within Land within Land within.

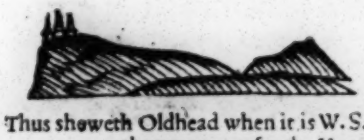


This followeth the former figure, the eaſtermoſt hommockes at A are the high hills about Iochull, which you may hardly ſee when C. Cleare is N.W. from you 7 or 8 leagues off, they lye farre within the land, and the clouds oftentimes hang over them.

C. Cleare Oldhead Poynt of Corek within the Iland Hil within Iochul.



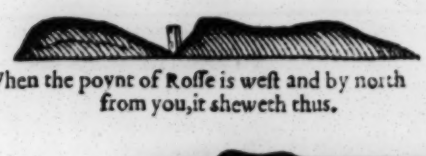
When you are before Oldhead two leagues, or two leagues and a halfe a ſeaboard the land, then sheweth the land to the weſtwards unto C. Cleare, and the land to the eaſtwards of Oldhead, in this forme.



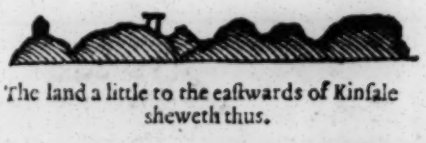
Thus sheweth Oldhead when it is W. S.W. a halfe league from you, then may you ſee the Haven of Kinſale open.



When Oldhead is weſt two leagues from you, it sheweth in this forme.



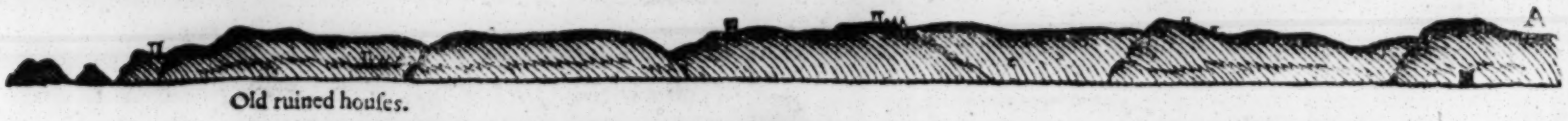
When the poynt of Roſſe is weſt and by north from you, it sheweth thus.



The land a little to the eaſtwards of Kinſale sheweth thus.



The land to the eaſtwards of Corck towards Iochull, sheweth in this forme.



Old ruined houſes.



The Rock betwixt Iochul and corck.

When you are to the eaſtwards of Corck. not far from the land, and that the harbours mouth doth begin to open, then sheweth the land as is deſcribed in theſe two figures, as the AA. belonging one to the other, being neare the land it ſeemeth to be high land, but a far off (when you can ſee the high inner land, within Iochull over the cliffe land) it ſeemeth to be but low.

Innerland, far within the Land. Innerland north and by weſt.



Mount of Iochull.
Theſe two figures belong at the BB, one to the other.
Dongarvan.



When you are before Iochull, or thereabouts, (two or three leagues from land) ſo that the high mountaine of cape Quin be north and by weſt from you, then sheweth the land thus, the double innerland is very high blew land, you may ſee it in cleare wether twelve or thirteene leagues off.



Corck. Rock The high land of Dongarvan. Iochull.



Theſe two figures belong at the CC one to the other, and is the forme of the land betwixt Corck and Iochull.
Northnortheaſt.



The high land of Dongarvan sheweth thus, being northnorthweſt from you.



Thus sheweth the high land of Dongarvan, when the weſtermoſt end of it is northweſt from you.

The First part of the Fierie Columne.

THE THIRD BOOKE,

Of the

WESTERN NAVIGATION

Containg

The deſcription off France, Biſcay, Galliſſia, Portugaell, and Algarve, from Heyſſant to the Straights of Gibraltar.

The firſt Demonſtration,

Wherein are ſhewed the coaſts off France from Heyſſant to the River of Bordeaux.

FRom the Iland Ile de Bas unto the Fourne, (the outermoſt or weſtermoſt end of the maine land of Britaigne) the courſe is weſtſouthweſt, and weſt and by ſouth thirteene leagues. About halfe wayes betwixt them both lyeth Obbevrack, or Abberwrack.

Abberwrack. About a league northweſt without the rocks of Obbevracke or Abberwracke lyeth a rane of Rocks under water. They that by night wil ſaile or turne to windwards from the Fourne or towards the Fourn, let them not come thereabouts nearer the land then in 45 fathom.

The fourn. A league to the eaſtwards of the Fourne, and all alongſt the coaſt even unto the Fourne, lye many long black ragged rocks, at many places to looke to like Villages, theſe are called the Ovens, within them on the maine land (which is not very high, men ſhall ſee (ſayling alongſt by them) many white ſand-bayes, and here and there ſome little houſes, whereby the foreſayd land thereabout is very good to bee knowne.

Vshant. The Fourne and Uſhant lye weſtſouthweſt and eaſtnortheaſt diſtant two great leagues. Uſhant ſheweth itſelfe at ſea at the ſouth-end low, and at the north-end going up ſloping, upon the midſt of it ſtandeth a little flat Tower, by which markes it is good to be knowne.

For to ſayle through within Uſhant, the courſe from the Fourne to S. Mattews point is ſouthſoutheaſt foure leagues. At the point of the Fourne lye two rowers of little Rockes, and to the ſouthwards of them alongſt the Coaſt lye three other heaps of rocks, each of them about an Engliſh mile one from the other: runne alongſt within two Cables lengths by the foreſayd rockes at the poynt, which is much nearer the eaſt ſide, or the maine land, then Uſhant, for to ſhun the norther Haghels, which doe lye betwixt Uſhant and the foreſayd rockes or Ovens, or elſe if you keepe S. Matthewes Abbey in the low valley to the eaſtwards of Conoort, and ſayle ſo right with it, then you run through neereſt the eaſt ſide, and in the middeſt of the channell betwixt the foule ground and the Blanckbay Rockes, untill you come thwart of Blanck-bay, or neare Conquets-oort, there ſtandeth a mill upon the high land alone, when it is eaſt from you, then the ſouther Hagels lye weſt and by north from you, and the norther Haghels northweſt and by weſt: there is alſo a high flat peece of land, a little to the eaſtwards of the Abbey of S. Matthewes, the top of it being even and plaine, like unto a long plaine houſe, when that commeth even without the poynt Conquets oort, and the foreſayd mill be eaſt and by ſouth, and eaſtſoutheaſt from you, then lye the north Haghels weſt and by ſouth from you, ſo that when the Norther-Hagels. foreſayd mill is eaſt thwart from you, then are alſo the Haghels weſt thwart from you. When Halman or Hayman hill Halman. (that is a high rock lying at the eaſt end of Uſhant) commeth over the N.W. end of the northermoſt Mollens, by the French called Chemines, then are you alſo thwart of the Haghels.

Hagels.

Hee that muſt turne to windwards from the Fourne towards Conquet, or S. Matthews point, let him make uſe of theſe Conquets-oort. markes: In the poynt of Conquet haven, or Conquets-oort, are two valleys, the one is great, that is the weſtermoſt, and one little, that is the eaſtermoſt, in manner as is here portrayed.

S. Mattewes Cloyſter. Conquets oort.



When you runne over to the eaſtwards towards the land, and that the Abbey of S. Matthewes commeth a Capſtone Barres length to the eaſtwards off the ſmalleſt valley, according as is ſhewed in this figure, then it is time to caſt about: and when you runne over to the weſtwards towards Vſhant, and that the foreſayd Abbey of S. Matthewes commeth a little without the poynt off Conquet Haven, you muſt alſo caſt about, for when the foreſayd Abbey commeth two ſhippes lengths without the foreſaid point then are you cloſe by the Haghels. The Norther and the Souther Haghels lye about a ſhot of a caſt peece diſtant one from the other.

Two or three Cables lengths thwart from the point off Conquet haven, or Conquets-oort to ſeawards, lieth a ſuncken rock, which with a ſpring tyde commeth above water, called the Vintner, by de French le Bell. For to avoyd it comming from the northwards, or from the Fourne, and being come from the foreſaid markes (of S. Matthews Abbey in the great valley of Conquets-oort) unto cloſe by Conquets-oort, then runne cloſe about by it, alongſt within a Cables length of the poynt, or keepe the Abbey of S. Matthewes even without the poynt of Conquet-oort, and ſo cloſe about it, within a cables length, as before is ſayd, and then you ſhall leave the Vintner a Cables length or two on the ſtarboard ſide of you, and can take no hurt of it. The Vintner.

When the litle Church upon the poynt off Conquets-oort is eaſt from you, then is the Vintner weſt right thwart from you, or elſe when that the Souther-houſes off Conquet, beginne to come without, or to the point off Conquet, then you have alſo the Vintner, upon your ſide, weſt and weſt and by ſouth from you, a little ſhoft off a caſt peece.

If you ſayle into Conquet-haven, then runne about the poynt within a cables length, as is before ſayd, untill you ſee the haven open, then you come againſt the Feneſters, which are rockes that lye off about a Cables length from the Eaſtland of Conquet-haven under water. For to avoyd them, run alongſt by the norther ſhoare, untill you come within the Haven. Betwixt the Feneſtiers and the blanck Moines (that are rockes by Saint Matthewes poynt) is a good Road under the Abbey of S. Matthewes, as well for them that are bound to the northwards as to the ſouthwards. If you wil goe into this road comming from Conquets-oort, then run right with the blanck Moines, untill that the Abbey of Saint Matthewes be eaſtſoutheaſt from you, ſayle then towards it untill you come before the Abbey, and anckor there in 6 or 7 fathom. Conquet-haven. Feneſtiers. Blanck Moines.

About a league to the eaſtwards of S. Matthewes point, towards Breſt, lyeth a ſuncken rock, about halfe a ſhot of a caſt peece from the north ſhore. If you will ſayle into Breſt water, then goe from S. Matthewes point away eaſt and by ſouth, and eaſtſoutheaſt, and keepe the north-end off the Southermoſt Mollens, without S. Matthewes point, ſo long, untill that the mill upon the north-land come to the northwards of the trees, then you ſaile alongſt to the ſouthwards of the foreſaid rock, and ſo doing, you can take no hurt off it; but if you bring the ſouth end of the Mollens neare or to S. Matthewes point, you ſhall not faile to ſaile upon it.

For to ſaile to the Northwards of the foreſaid Rocke, you muſt runne from Saint Matthewes point alongſt by the North-land, and keepe the ſouthermoſt Mollens hidden behinde the great Rocke that lyeth off from Saint Matthews point, and ſaile then right with the weſt point of Bartrams bay, untill that the foreſaid mill ſtanding upon the North-land, commeth to bee northweſt and by north from you, and the trees ſtandeth northnorthweſt from you, then ſhall you be paſt the foreſaid Rocke; but to runne alongſt to the ſouthwards of it, is beſt and broadeſt. For to ſayle forth alongſt

The First ~~Booke,~~

OF THE NEW,

FYRIE COLOMNE,

Of the WESTERN NAVIGATION.

THE THIRD ~~PART~~

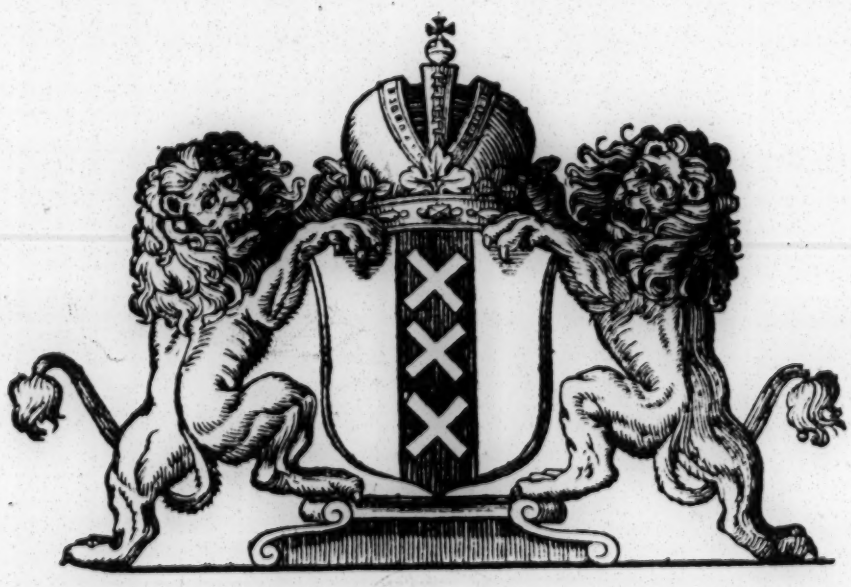
wherein the Descriptiõ,

Of the

Coasts of France Galisia Portugael, and Spaine, from Heyssant, to the Straites of Gibraltar: and with all the Flemish, the Canary, and Green Ilands.

Which is seth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very serving-able for all Mariners and Pilots.



Printed at Amsterdam,

By Iacob Columne, on the Water, in the Firie Columne,
Anno M. DC. XLIX.

POICTOV

BRETAIGNE

BISCAIA

GALLISSE

Rivier Van Bordeaux

Bayone

S. Sebastian

Bilbao

Castro

S. Andero

Lanes

Ribadeus

Corunna

C. de Finisterro

C. de Machichaca

Chemineez

Heusmit

De Seim

Crion

Avilés

Artade

Luarca

Castropol

C. de Ortegal

Ponte de Ma

Ferol

Bilanke

Fontenne

P. Vedra

M. Cambela

Viana

Baiona

Oria

Deva

Barma

Platena

Laredo

C. Rego

Santona

Liamas

Villa Viciosa

Ribadeo

C. de Breio

I. S. Cypriàn

Viveras

S. Marcus

Karuus

Sisargas

Ouespis

Cayrano

Ribeyra

Corcubion

Muros

Noya

Padron

Vigo

Bayona

Caminha

Viana

Porto

Aveiro

Figueira

Leiria

Peniche

Cabo Carvoeiro

Cabo Mondego

Cabo da Roca

Lisboa

Cabo Espichel

Setuval

Cabo de Sines

Cabo de Santa Maria

Cabo de S. Vincente

Tavira

Cabo de Cantin

Cabo de Tres Forcas

Cabo de Tenez

Cabo de Gat

Cabo de Palos

Cabo de Martin

Cabo de Nao

Cabo de la Fraga

Cabo de Salou

Cabo de Tortosa

Cabo de Oropesa

Cabo de Cullera

Cabo de Denia

Cabo de Santa Pola

Cabo de Palos

Cabo de Gata

Cabo de Sacratif

Cabo de Tres Forcas

Cabo de Tenez

Cabo de Cantin

Cabo de Espartel

Cabo de Santa Maria

Cabo de Sines

Cabo de S. Vincente

Cabo de Santa Maria

Cabo de Espichel

Cabo da Roca

Cabo Carvoeiro

Cabo Mondego

PASCAERTE
van
VRANCKRYCK, BISCAYEN. en
Galiſsen, PORTUGAEL, en
Andaluſien, van
Heiſſant tot de Strate Gibraltar
Nieulix Wtgegeven
Door
Iacob Colom.

Duytſche mijlen 15 in een graet — Lieues d'Allemaigne 15 en un degre
Spaenſche mijlen 17½ in een graet — Lieues d'Eſpaigne 17½ en un degre
Engel en Fra. mijlen 20 in een graet — Lieues Angl. et Franc. 20 en un degre

PORTUGALIA

Ameria
Salabrenia
Malaga
Alcaßar
Tanger
C. de Spartel
Arſila
Larache
Cap de Cantin
Bayona
Viana
Eſſoſo de
Villadel Conde
Mezilla
Porto
Porto
Aveiro
C. de Mondego
Figuera
Lisbona
Setubal
St Ubes
C. de Sichel
C. de Fiſton
Peniche
Long Reeue
S. Cruz
Barlenges
C. S. Vincent
Sagres
Tavila
Villanova
Ayamonte
Cabo de Palos
Cartagena
Alicante
Denia
Valencia
Tortoſa
Cabo de Tortoſa
Cabo de Salou
Barcelona
Rosas
Cabo de Creus
Cabo de Gata
Cabo de Palos
Cabo de Nao
Cabo de Martin
Cabo de Palos
Cabo de Tortoſa
Cabo de Salou
Cabo de Creus
Cabo de Gata
Cabo de Palos
Cabo de Nao
Cabo de Martin
Cabo de Palos
Cabo de Tortoſa
Cabo de Salou
Cabo de Creus

Duytsche mylen 15 voor een graadt
Spaensche mylen 17½ voor een graadt
Engel. en Fra. mylen 20 voor een graadt

BRETA I

Bacwent
Lefou
Penes
Blanc bij
Noordhaegh
Zuydhaegh
Heysande
Kalman
Oudam
Boxbergh
Boldavit bay
Boldavit
Fontenau
Vrischebay
Slaeplakens
Paiman
Odegierne
Weste Penmarker
Breesondt
Keiser
Blanck-meines
Calenzier
Kabbergen
Kommenessen
Lefou
Oost Seems
West Penmarkes
36

De Cuſte van
Bretaigne van Heyſandt
tot Boelyn
Door Iacob Aertſz Colom.

Vannes
Auray
Virane
Hoeck van
't Meylandt
S. Iolme
Blauet
Morbeam
Arabat
Quinperley
Gloylandt
Baerſe
Graije
Cardinal
Binſet
Tuindaer
Isles aux
moutons
Glenant
Ooſter Penmarkes
Bel isle Boelyn

Duytsche mylen 17 voor een graade Lieues d'Allemaigne 17 en un degre

Spaensche mylen 17½ voor een graade Lieues d'Espaigne 17½ en un degre

Engel en Fra. mylen 20 voor een graade Lieues Angl. et Franc. 20 en un degr

De Custen van Poicton En Xantoigne vanden Cardinael tot de Riviere van Bourdeaux

Roche Bernard

S. Nabor

Isle de Noirmoutier

Pierre Percée

Pierre mer

Boutes

The Grave

Oleron

S. Nicolas

Keymagster

Ilde

Armentiers

Bosch

Vlamicke Ligt

Pasquetier

Heis

Cardinael

Urkama

Les Costes de Bretaigne entre Rey: sandt & la Riviere de Bourdeaux:

't Vervolgh vande Riviere van Bourdeaux

Roschelle

Pont Maran

Ylem

Lasson

I. Fredelnes

Laverdin

Brandt Eylandt

Tour de Cordt

Tour de jour

Nazare

Front

S. Moijse

S. Jean d. Angely

Seszenbanck

Sertroise

Duyrcks hoop

Kasteel Chasteau

Bourdeaux

Chaumean

S. Marie

Banjaert

Kelkade

Le Silion

Oleron

Sales

Marennes

Talement

Breeck meitz naulens

Mortaigne

Porthus

Matrimesande

Rivier van Bourdeaux

Soulack op zee

Soulack binnen

Zuyder Isle

22

20

longst to Creſt (being paſt the foreſayd rock) you muſt run forthwithin two cables lengths alongſt by the north ſhoare. A little within the eaſt poynt off Cordon, or Claeſdownes, lyeth a rane off Rockes, about the middeſt of the channell in the mouth of Breſt water, which at low water lye above water, and at high water are under water, called the Baginne, you may runne alongſt on both ſides off it, but to the northwards of it, is beſt, when the ſouth poynt of Breſt-water commeth over the poynt off Crodan, then are you thwart of the foreſayd Bagyne, which lyeth about two cables lengths from the north ſhoare, runne alongſt to the northwards of it: When the Breſt commeth without the poynt, ſayle then ſo right to it, you muſt anckor there with an anckor to ſeawards in eight or nine fathom, and with a cable a ſhoare faſt on a tree: When you come within the Bagyne, you may edge up to the eaſtwards, or to the ſouthwards before the river of Landerneau or Lefou, and anckor there under the ſouth-land, in ten, twelve, or thirteene fathom, before the little towne old Croidan. Breſt-water, or the river of Landerneau, lyeth in moſt eaſtnortheaſt, and it is Pilots water, hee that is bound in there, may take a Pilot to bring him in where hee deſireth to bee, It floweth there with an ordinary tyde, three fathom up and downe, a ſouthweſt and by weſt, and northeaſt and by eaſt moone maketh there full ſea.

Baginne.

Lefou.

If you come to anckor within Breſt, you muſt pay for anckoringe ten ſoubs, & for it you ſhall get a ticket off freedome. If it ſhould happen that you ſhould looſe your ſhippe upon Britaigne, you might there with challenge your goods, elſe they are unfree.

Bartrams bay lyeth about two leagues to the eaſtwards of S. Matthewes poynt, a little league paſt the foreſayd ſuncken rock, there is good anckoring for a north, and northeaſt wind in 10 and 11 fathom.

Bartrams-bay.

Over againſt Bartrams bay lieth Croidan or Claeſdownes from S. Matthewes poynt, ſoutheaſt diſtant about 3 leagues, it is a great bay. For to ſayle from S. Matthewes poynt to Croidan, you muſt keepe the ſouthermoſt Mullens even without the black Moines (that are the Rockes without S. Matthewes poynt) and go away eaſt and by ſouth, and eaſtſoutheaſt untill you come before the bay, and may ſee open into it, then you ſhall ſee a Chappell, or little Church ſtand upon a chindle, run in right with it, and anckor thereabouts, in 6, 7, 8, 9, or 10 fathom, there is the beſt road.

Croidan.

The Mullens are the rockes which lye there to the ſouthwards of Uſhant, and to the weſtwards from Saint Mathews poynt. Betwixt them and Uſhant lyeth a channell northeaſt and ſouthweſt through, which is indifferent large and broad, and deep enough, there remaineth at low water 6, and 7 fathom water. Hee that commeth from the northwards, and can not ſayle a weather of Uſhant and the Mullens, by reaſon of the flood may run through here, or he that commeth out of the ſea, and with northerley winds, cannot ſayle a weather off Uſhant, may with a floud run through here, and ſo further his voyage, when men runne through here, either in or out, and keep the middle of the channell betwixt both lands they can take no hurt.

Mullens.

From S. Mathews point to the race of Fontenay, or the Keyſer and Lavender, the courſe is ſouth and by eaſt, five leagues, betwixt them both lye divers rocks, where of men muſt take good heed, as the Hen with the Chickens, the Collier, the Falconers, Scheminckelborrowes and other more. The Hen with the Chickens, and the middelmoſt Falconer or Foukeniſſe, lye from S. Mathewes poynt ſoutheaſt and by eaſt diſtant a league and a halfe, but the Collier lyeth from S. Mathewes poynt ſouthſoutheaſt alſo a league and a halfe.

Heine Chickens.

Falkoners.

The Falconers, or Foukeneſſen, lye from the weſt poynt of Croidan about weſtſouthweſt an Engliſh mile. The innermoſt or ſouthermoſt Falconer lyeth from the northermoſt ſouthſoutheaſt about a halfe league, or two ſhots off a caſt peece, and from Croidan ſouthweſt and by ſouth, and is covered at high water. Northnortheaſt a cables length from it, lyeth another ſuncken Rocke, which at low water may even be ſeene. To the weſtwards of the northermoſt Falconer lyeth alſo ſuncken Rock which at low water may even be ſeene.

The ſouthermoſt Falconers.

The Hen lyeth from the Falconers weſtſouthweſt about 2 cables lengths, or a ſhot off a caſt peece, it is a round ſharpe rocke, it is round about it deepe and cleane, in 6 and 7 fathom. The Chickens are two ſharpe little rockes, which at low water may even bee ſeene, and lye about the ſhot off a Baſe northnorthweſt from the Hen, and weſt from the northermoſt Falconer.

The Hen Chickens.

The Scheminckelbroughts lye to the ſouthwards off the Falkoners, men may run through betwixt them in ten fathom,

Scheminkelboroughs.

to the poynt of Croidan, there is good road and ankor ground.

If you will ſayle from S. Matthewes poynt to the Race of Fontenay, you muſt goe away ſouth and by eaſt, and bring the mill off Fenefiers, which ſtandeth upon the eaſt poynt of Conquet-haven, over the poynt off Saint Matthewes, a little to the weſtwards off the Abbey, and keepe them ſo ſtanding ſo long as you can ſee them, and you ſhall not come to neare the foreſayd Rockes, to take any hurt off them. When as them you come to the Keyſer and Keyſerinne, firſt give the Keyſer a birth, becauſe off ſome ſuncken Rockes which lye off from the eaſt ſide of it under water. From the ſouthweſt ſide of the Lavender runneth off a foule ledge Rockes, called the Calfe, there the tyde falleth very ſtrong over it, with very great rippeling. This Channel off the Race of Fontenay, lyeth through betwixt the Keyſer and Lavender ſouthſouthweſt and northnortheaſt. He that will ſayle through here, muſt be very careful to caſt his tides well, for it runneth moſt thwrat over this Race, ſo that with a ſouthweſt wind, and an outfall or ebb, and alſo with calmes, it is very dangerous to come into this Race.

Keyſer Lavender, Race off Fonteney.

A little to the ſouthwards of the Keyſer, lieth the eaſt end of the Seames, and lye from thence at leaſt three or foure leagues weſtnorthweſt into ſea. A great league northweſt from the weſt poynt off the Seames, lyeth a ſuncken rocks, whereof men muſt take heed.

Seames.

And weſtſouthweſt about two leagues from the Seames, lyeth a row of rocks, like a bancke, whereupon it is not deeper then ſeven fathom, but betwixt the rocks and the Seams, it is 50 fathom deepe.

Betwixt the Seames and Uſhant the broad ſound lyeth in eaſtnortheaſt to S. Mathewes poynt, and from S. Matthewes poynt weſtſouthweſt 7 leagues into ſea.

Broad-ſound.

To the eaſtwards of Fontenay, or the Lavender, lyeth the Frieye Bay, there men may anckor for a ſoutheaſt and eaſt ends, in good anckor ground.

Frieſe bay.

To the eaſtwards of the Frieze Bay, lyeth Boldavids Bay a broad deep ſound, lying into the land eaſtnortheaſt. At the eaſt ſide of that haven lie 2 little Ilands or Rocks, where men may anckor round about them, and lie ſheltred for alle windes.

Boldavids Bay.

From the Race of Fontenay to the Pennes, the courſe is ſoutheaſt about nine leagues, betwixt them both lieth Oldyarne, a good Haven, about five leagues E.S.E. from Fontenay, thwart before the entry of it lyeth a banke where men may run about it on both ſides in 6 fathom.

Oldyarne.

The ſouth poynt of this Haven is flat, therefore run in alongſt by the north poynt, there is at low water not leſſe then 3 fathom depth. From Oldyarne to the Pennes it is ſoutheaſt and by ſouth.

If you will anckor before Port Kapſtand, you muſt anckor in 12 or 13 fathom, before the village that ſtandeth upon the high land about halfe wayes betwixt the poynt of the Race, & the great ſand-bay of Oldyarn, where the little ſharpe Tower doth ſtand, the poynt of the Race ſhall then lie from you about northnorthweſt, and you ſhall then lie a great half league from the land, further off from the ſhore it is rocky and foule ground, as ſome ſay. There have ſome nevertheleſſe come to anckor there by night in 3 or 4 leagues from the ſhore in 25 fathom, but have not received any hurt neither of cables nor anckors.

The weſt end of the Seames, and the Pennes, lie ſoutheaſt ſomewhat ſoutherly, and northweſt ſomehat northerly, diſtant about 13 leagues.

The knowledge of the land betwixt Fontenay and Oldyarne, are two round hills, which men doe call the ſheets, or Slaeplakens, to the weſtwards of them ſtand two Mills. It is a very ragged poynt, and by theſe foreſayd markes very good to be known. Men may ſee them without the Seames in 55 fathom.

Sheete.

From Oldyarne to the Pennes lyeth the coaſt ſoutheaſt & by ſouth 5 leagues.

The Pennes are very good to be known, for him that hath ſeen them once: upon the ſoutheaſt end ſtandeth a thicke flat Tower; a little to the weſtwards of it ſtandeth a ſharpe tower, and ſomewhat more to the eaſtwards [illegible] the high land, ſtandeth a village to ſee to like a caſtle, upon the eaſt ſide thereof ſtandeth a flat tower, and there cloſe to the land lie 2 great rocks.

The Pens.

The Pennes lye off from the maine land, ſoutheaſt two leagues into the ſea. For to ſayle in there, you muſt come in there from the eaſtwards, and run alongſt by the ſtrand of the maine land, leaving all the rocks on the larboard ſide, untill that you come to a great rock, which you muſt leave on the ſtarboard ſide, and runne about the ſouthwards of it (bing paſt it, edge

it, edge within it up towards the northweſt, and you may anckor there a little within, in three fathom at low water, lying there, you can ſee no ſea, but at high water the ſea cometh very much tumbling in through the Rocks: You may goe away from thence at high water ſoutheaſt through the Rocks into ſea, but you muſt take very good heed, becauſe it is there full of Rocks, whereof ſome are above water, and ſome under water. Without the foreſayd great Rock in the comming in of this haven, it is at leaſt ten fathom deep, ſo that for need men might well ſave a great ſhip there.

Glanons Glenant.

From the Pennes to the Glannons or Glenant, the courſe is eaſtſoutheaſt with that courſe you ſhall run alongſt to the ſouthwards of them. Within the Glanons lieth a Haven, called Bindet, at the eaſt point of that Haven it is full of rocks. For to ſayle in there, you muſt take heed unto theſe marks: there ſtand two Mills farre within the land, bring the eaſtermoſt of the 2 over a little caſtle that ſtandeth upon a point within the Haven, and run in, keeping them ſo north and northeaſt, and by eaſt in, and then you cannot take hurt on neither of both ſhores, and being come within the haven, anckor before the Town.

Bindet.

A league ſouthweſt from Gloyland or Glenant, by the Dutchmen, called the eaſter-Penmarkes, lyeth a great Rock under water, but is good to eſpied, in regard the ſea alwayes breaketh upon it, as well within as without this Rock, it is 40 fathom deep.

When you come off from the Pens, with an eaſtſoutheaſt courſe, you ſhall runne alongſt farre enough to the ſouthwards of it. About 2 leagues to the eaſtwards of Glenant, lye the Ilands of Muttons, by the French called Iſles aux Montons, you may ſayle through betwixt them and the main land, unto Groy or Blavet, alſo you may anckor within them in 10 or 12 fathom, betwixt the land and the foreſaid Ilands, which are cleane upon the north ſide.

Muttons-Ilands.

Betwixt the Iland Mutton and Glenant lyeth a rock, for to avoyd it (for them which will ſayle through there betwixt them) they muſt leave one third part of the channell towards Glenant, and the other two third parts towards Mutton, and then they may boldly run through there without feare.

From Mutton to the Iland Groy, the courſe is eaſt and by ſouth, upon the outer ſide of Groy ſtand 3 or 4 milles, the eaſt end of it goeth ſteepe downe, and the weſt end ſloping and flat down, thereby it is good to be known. Vnder Groy is good anckoring for a ſouthweſt winde in ſixe or ſeven fathom: Vnder the northeaſt poynt alſo is a good road for a weſtſouthweſt and northweſt winde, there is very good anckor-ground. At the ſouthweſt end runneth of a foule ledge, where of men muſt take good heed.

Groy.

Within the Iland Groy lyeth the Haven of Blavet, which lyeth in about northweſt in 4 and 5 fathom. Vpon the weſt ſide of this haven ſtandeth a high ſharpe Tower, called Quinperly, from the eaſt poynt runneth off a great ledge of rocks, called the Baers, within it on the eaſt ſide of the entry of the Haven lye two ſuncken Rocks, alſo on the weſt ſide a Rock with a hole, which at halfe ebbe is uncovered, whereof men muſt take very good heed in the comming in; Men run in alongſt by the weſt land, for to eſchew the foreſayd ſuncken Rock and foule grounds. The marks for to ſayle in there are theſe, there lyeth a little Iland within in the middeſt of the haven, which you may ſee when you are without the Haven. To the eaſtwards of that little Iland upon the maine land, ſtandeth an Abbey, bring that Abbey right to the eaſt poynt of the haven, which lyeth within the Baers, and ſayle in with it, untill you come thwart of the eaſt poynt, within the Baers, and runne in about by it: being within it, there it is wide and broad, you may anckor there before the foreſayd little Iland in 5 or 6 fathom, there it is at low water 3 or 4 fathom deepe, or elſe men commonly runne in about, by the poynt, untill they come in the oaze.

Blavet.

From the Pennes unto Bell-Ile, the courſe is eaſtſoutheaſt one and twenty leagues, but from Groy to Bell-Ile it is ſouthſoutheaſt five leagues. Bell-Ile hath at the northweſt end a ſteepe poynt, lying [illegible] with a great ſaddle, thereabouts ſtand alſo ſome little [illegible], and the end goeth very ſteepe downe.

When as Bel-Ile lieth northnortheaſt from you, the weſt end ſheweth it ſelfe in there parts: the weſtermoſt whereof is a great Rock, which floweth at a very high water almoſt under, at the eaſt end there divided it ſelfe off alſo a great rock: by theſe foreſayd marcks it is indifferent well to be knowne, men may ſee Bell-Ile out of the ſea in 55 fathom. At the ſouth ſide lye off many rocks and little Ilands.

Road to know Bell-Ile.

If you will ſeeke a roade under Bell-Ile, then you muſt give the northweſt end a good birth, off from it lyeth a ſuncken rock under water, a good wayes from the land: being come within it, ſayle then within two Cables lengths alongſt by the land, within a Baſe ſhot about by the north poynt, untill you come before the village with the little ſharpe Tower, called Pauls, there ſtandeth a caſtle upon the poynt to the weſtwards of the foreſayd little Tower, anckor within that poynt in nine or ten fathom, there you ſhall lye landlockt for a ſouth, ſouthweſt and northweſt wind. If it blow more northerly, you muſt ſhift, and runne before the eaſt end (which is about halfe a league broad) and anckor there in ten or eleven fathom. This Iland lyeth about ſoutheaſt and northweſt, according as the winde bloweth, men doe ſhift there from one road to another, it is there every where good riding.

Road under Bell-Ile.

Within the Iland Bell-Ile, to wit, betwixt Bell-Ile, and the maine land lye many little Ilands, where at divers places men may ſayle through to the Rivers of Vannes, or Morbeam, Roche, Barnard, and the river of Nants, called the Loire. Of theſe Ilands are three the principall, the eaſtermoſt is called the Cardinall, the eaſt poynt whereof, and there poynt of Bell-Ile lye one from the other direct eaſt and by north, and weſt and by ſouth about 4 leagues. The middlemoſt is called by ſome alſo the Cardinall, or elſe together with the eaſtermoſt the Cardinalls. This hath a good Haven on the north ſide, going in by a great Rock. From the northweſt poynt of the northermoſt or weſtermoſt, runneth a ſandy ſtrand unto the maine land, againſt the poynt betwixt Blavet and Morbeam, ſo that men cannot ſayle there betwixt that and the maine, but at high water it is moſt covered, and at low water it lyeth moſt drye, at low water men may goe over there one foot from the Iland to the maine land.

Cardinall.

Sandbanck

He that commeth from the weſt, and is bound to Morbeam, Roche Barnard, or other places thereabout, muſt run to the ſouthwards of it, & he will not ſayle about to the ſouthwards of Bell-Ile, he may ſayle through betwixt the northermoſt and the middlemoſt Iland, and alſo he may ſayl through betwixt Bell-Ile and the foreſayd Ilands, about to the eaſtwards of the Cardinall. The channell there betwixt them both, is about a league broad and cleane, it lyeth through eaſtſoutheaſt and ſoutheaſt and by eaſt, men may run alongſt by the Cardinals either by night or by day, in 8, 9, and ten fathom, all cleane ſandy ground.

For to ſayle through betwixt the weſtermoſt, which is faſt at the north end with the ſtrand to the maine land, & the middlemoſt Iland, the courſe is from the northweſt end of Bell-Ile eaſtnortheaſt. A little from the eaſt end of the foreſayd weſtermoſt Iland, lyeth a great round rock, which you muſt leave on the larboard ſide, and run alongſt by it, within two or three Cables lengths, and then you ſhall leave on the ſtarboard ſide to ſeawards of you a great many rocks, ſome above and ſome under water, which lye towards the other Ilands, which you muſt give a greater birth to, then to the foreſayd great rock. From this foreſayd channell to the river of Morbeam, or S. Iolme, the courſe is northeaſt or northeaſt and by eaſt or els if you run about to the eaſtwards of the Cardinal, and are bound to Morbeam, then goe away from the eaſt poynt of the Cardinall, firſt northweſt and northnorthweſt and you ſhall have then in that fareway 8, and 9 fathom depth, goe then by little and little more northerly right with the point, which lyeth to the weſtwards of S. Iolme, there runneth off the ſayd poynt of S. Jolme, a ledge or riffe of rocks allmoſt a halfe league into the ſea, which you muſt leave on the ſtarboard ſide, and runne into the weſtwards of it, betwixt the ledge and a little Iland which lyeth eaſtſoutheaſt from the weſt poynt, and is faſt to the foreſayd weſt poynt, with rocks and foule ground, ſo that you cannot ſayle in alongſt to the weſtwards of it, nor through between them: ſo ſoon as you ſhall be entred within the foreſayd little Iland, you muſt give weſt poynt a birth, and run in alongſt by the eaſt ſhoare, which is flat, and lyeth from the Tower of S. John to the River of Vannes northweſt and ſoutheaſt but you muſt be ſure to reckon your tyde well in this Channell, for it runneth in and out the River of Vannes ſo ſtrong that you cannot ſayle in with an ebbe, although it blow a ſtorm, likewiſe doth it to the contrary with the flood, therefore you muſt ſayle in there with a ſtill water. At the middle poynt where the river doth devide it ſelfe in two (whereof the one runneth to Vannes, and the other to Auray) lye many rocks, the moſt part under water, which you leave on the ſtarboard ſide when you are bound to Morbeam or Auray, and on the larboard ſide when you are bound to Vannes when you are come from ſo far within, that the Tower of Morbeam is weſt from you anckor there in the middeſt of the haven, in 9 fathom, and then ſhall Auray the innermoſt little Tower lye northnorthweſt from you, and the other

Morbeam.

little

little Tower north and by eaſt, but the point of Mayland eaſt-ſoutheaſt. The weſt ſhoare thwart of it is very ſteepe, but oaſie and ſoft, you can take no hurt of it, although you ſayled right againſt it.

The eaſt poynt of the Cardinall, and the entring off the Haven of Morbeam lye N.N.W. and S.S.E. one from the other.

From the eaſt poynt of the Cardinall to the River of Roche Barnard, the courſe is right northeaſt: there lyeth a little Iland about halfe wayes betwixt the Cardinall and the foreſayd River, or rather nearer the Cardinall then the River (for when men are by the River, they can but even ſee the foreſayd little Iland) men runne with the foreſayd courſe of northeaſt cloſe alongſt to the weſtwards of that litle Iland, and ſhall fall a little to the northwards of the river, run then within a Cables length alongſt by the ſhoare unto it, untill that the river doe open it ſelfe, and then ſayle in amids the channel, and give the rocks a birth that lye at the eaſter ſhoare. Being come within the rocks, you may anckor there, or elſe ſayle on againſt the ſhoare on the ſtarboard ſide, and ſo may ſave ſhip and goods without anckor or cable, if there ſhould be ſuch need. At low water with an ordinary tyde, there is about eleven, and with a ſpring nine foot water; with an ordinary tide it floweth there about a fathom, but with ſpring 2 fathom up and downe: the entring of the river lyeth in eaſt and by ſouth. A little to the eaſtwards of the rivers mouth, lyeth a great rock, which at high water is covered.

Hee that commeth from the River of Nantes, and is bound to Roche Barnard, and is not well acquainted there betwixt both, let him runne ſo farre to the ſeawards of the Cardinall, (when hee is to the weſtwards of the Four) untill that hee run about a ſeaboard of that foreſayd little Iland (lying halfe wayes betwixt the Cardinall and the River of Roche Barnard) then goeth he ſurely cleare of all the foule ground and other dangers, men may ſayle cloſe alongſt by it to the weſtwards, but to the eaſtwards of it lye many Rockes and ſhowlds.

Hee that will ſayle alongſt to the eaſtwards or to the northwards of it, muſt leave about 2 third parts of the water to the Iland, and one third part towards the land, and ſo run through betwixt them, but muſt looke out wel.

Croſwyck

Betwixt the rivers of Roche Bernard and Nantes, lyeth Old-downes, Croiſill, or Croſwyck, and Poelgem. Croſwyck hath two poynts, within the northweſt point lyeth the great village of Croſwyck, which hath a thick tower, and there is a great indraught like a haven, where men may goe to anckor in five, ſix or ſeven fathom: to the weſtwards of it ſtandeth alſo a flat Church upon the high land. The land of Old-downes lyeth a little to the northwards of the Church. Poelgem is a village to the eaſtwards of Croſwyck, with a high ſharp tower.

Old-downes Poelgem.

The Four.

About two leagues from the land ſouthweſt and by S. from Croſwyck, and weſt and by north northerly from the E. point of Poelgem, lyeth a great banck, called the Four, which at ſome places falleth dry at low water, and lyeth from Bell-Ile neare about eaſt and lyeth the longeſt way ſouthweſt and northeaſt.

Port to fayl into the River of Nantes.

If you will ſayle from Bell-Ile to the river of Nantes, then goe away from the eaſt end of the Cardinal, or from the eaſtermoſt rocks, that lye of from the Cardinall, directly E. N. E. towards the weſt point of Croſwyck, for to ſayle a wether of the foreſayd Four, ſo long untill it begin to ſhowld, and that the ſharp tower of Poelgem commeth againſt the higheſt of the eaſt point of Croſwyck, then you runne alongſt to the northwards of the foreſayd banck, goe then E.S.E. or according as the wind is eaſt & by ſouth, and E.S.E. on to the Rock with the hole, called Pierre-perce, but ſo that you come not very neare (at low water) the land ſomwhat to the weſtwards of Poelgem, for it is not cleane alongſt by it. Betwixt the Four and the point of Croſwyck it is in the fareway 8, 9, and 10 fathom deepe.

Pierre-perce.

From the point of Poelgem eaſtwards lye ſome little Ilands and Rocks, which are very foule, come not very neare them, nor the ſhoare thereabouts. If it ſhould happen that you ſhould turne to windwards, for at low water there falleth many of the rocks dry, when you come neare the rock (with the hole) then run alongſt to the northwards of it, and run in very cloſe by it, leaving it on the ſtarboard ſide of you for to avoyd the foule grounds, which lye off from the point of Poelgem towards this rock. Cloſe alongſt by this rock it is 4 fathom deepe. Being paſt this Rock with the hole) then runne all alongſt by the north ſhoare, unto S. Nazare in 3 or 4 fathom at low water, but you muſt take heed of a rocky point, ſomewhat to the weſtwards of S. Nazare, the markes thereof are theſe: There ſtandeth a mill upon the high land, ſomewhat farre within the land, when that commeth over a country-mans houſes, which ſtandeth below by the river, then are you thwart of the rocks, being paſt them, keep yet the north ſhoare, and runne alongſt by it, untill you come within the point of S. Nazare, and anckor there in 6 or 7 fathom. In the middeſt of the river betwixt the foreſayd rocks, with the hole, and S. Nazare, lyeth a row of Rocks, called Les Porceaux, theſe come at halfe tyde above water: Becauſe of them, and alſo more other ſhowlds, lying in the river, you muſt run all alongſt by the north ſhore, as is beforeſayd.

S. Nazare.

Les porceaux.

Somewhat within S. Nazare upon the north land ſtandeth a ſharp Tower, when that commeth without the ſouth land, then you cannot take hurt of the foreſayd rocks, run alongſt to the northwards of them, a little to the eaſtwards of them lyeth another ſhowld of Rocks, where men may run about the eaſtwards of it with great ſhippes, it is there very ſhowld water alongſt to the point; being within the point, men may anckor as is ſayd; in 6 or 7 fathom. To the eaſtwards of Saint Nazare lye two other villages, and there betwixt the Villages, it is very ſhowld and ſtony ground, there men muſt borrow over the ſouther ſhoare, but when you are halfe wayes to that eaſtermoſt Village then you may well ſayle right on with the point of the Village, untill you be paſt it, but againſt that eaſtermoſt Village on the ſouth ſide, upon the poynt, lyeth a banck, called Pynbuf which lieth at leaſt halfe wayes over in the River, but men may run through betwixt the point and this banke in 5 or 6 fathom, this is the road for ſhipps that are bound out to ſea.

Pynbuf.

A league further in, in the middeſt of the river lie two ſtony banks in the fareway. At Pelerin is the lading place, two leagues from Nantes, where the good is brought off with Lighters from the ſhips, but from S. Nazare to Nantes, or Pelerin, it is Pilots water, which men do commonly take in, by the above named ſharp Tower, called S. Nazare, where men (when they are within it) may anckor in 10 or 12 fathom, and ſtay for a Pilot.

Pelerin.

S. Nazare.

For to run into ſea from S. Nazare, alongſt to the ſouthwards of the rock with the hole, you muſt run firſt alongſt by the north ſhoare, as is before ſayd, untill that you come without the ſecond poynt of the River, edge then off from the north land to the middeſt of the River and ſayle a good wayes about to the ſouthwards of Piere-perce, when as you can ſee the Rocke (which lyeth to the northwards of Piere-perce) without the poynt, there it is deepe 4 fathom and a halfe, and when as Pierre-perce is N.N. weſt, and north and by weſt from you, then you come thwart of the Rock, and there you finde deeper water, to wit, five, ſixe and at leaſt 7 fathom, but when you come in the fareway of Pickeliers, then you get 10 or 12 fathom water.

Before the River of Nantes lye many bancks, but at half flood men goe over them, the ſouth poynt of the river of Nantes lyeth from the North poynt Northnorthweſt and ſouthſoutheaſt 4 leagues aſunder, to the ſouthwards of it, the land lyeth in with a great indraughr, and there men doe run into the Bay. Theſe uneven bancks in the river of Nantes, are very unlike, ſometimes men found in 15 fathom, and preſently afterwards but 7 or 8 fathom.

Banks before the Loiret.

But to ſayle from Bel-Ile to the bay or Armentiers you muſt goe E.S.E. untill that you ſee the Abbey of Armentiers to the eaſtwards of the trees, which ſtand within the land over the ſame Abbey, then goe on eaſt and by north ſo long untill that the Abbey come within the caſtle of Armentiers, then are you within the Monck legge. Goe then againe E. S. E. until that you bee within the rock of Pierremen, you may goe about it on both ſides, and when that you can ſee the Grave open, then you may anckor in 7, or 8 fathom, and row a ſhoare to fetch a Pilot, it is Pilots water. From Bell-Ile to Armentiers, the courſe is eaſt ſoutheaſt about 12 or 13 leagues aſunder.

Armentiers.

Pierremen.

From Armentiers to Uſe, or Heys, it is ſouth and by eaſt 7 leagues, and from Bell-Ile to Vſe or Heys, ſoutheaſt 16 leagues. The Iland of Pickeliers lyeth right before the poynt of Armentiers. Betwixt Armentiers or Pickeliers and Vſe, it is an uneven fareway, with many ſhowlds and bancks, from foure, five, ſixe, and ſeven fathom. Vpon the Vſe ſtandeth a ſharp tower and ſome litle houſes or milles, whereby it is very good to be knowne. It is in the fareway betwixt Vſe and Bell-Ile 35, and 40 fathom, but when men are within the fareway, it is 25 fathom deepe.

Pickeliers.

Heys or Vſe.

Vnder Vſe it is not very good riding, the ſea commeth allwayes ſo rowling in, as if the water come through under the Iland, at the north-end it is ſhowld water, the road is, when the Church ſteeples, is ſouthweſt from you, in eight or nine fathom; but men lye there not ſheltred but onely for a ſouthweſt and weſtſouthweſt winde, and it doth ripple there alwayes very much.

From

From Uſe to the Killiats, or to the Iland of Saint Martens, the courſes is ſoutheaſt twelve or thirteene leagues. Betwixt both lyeth the Bearges of Olone about halfe a league off from the land of Poictou, and eaſt and by ſouth ſeven leagues from Uſe in the right fareway, and in regard that it is nothing but Rocks and ſtones, therefore it is not good to come neare them in darke weather, men may ſayle round about them, and at low water, they are uncovered. If you will ſayle from Uſe, unto the Killiaets, or unto the tayle of Aiſe, through within the Baerges, then ſayle on firſt eaſt, and being within the Baerges of Olone, ſayle to the land of Poictou, which lyeth from Olone to Saint Martens Iland eaſtſoutheaſt, and from Olone to the Pickelliers northweſt.

For to ſayl into the Killiats.

From Olone to the Killiaets the coaſt lyeth moſt eaſtſoutheaſt foure or five leagues. For to ſayle into the Killiaets, which is in alongſt to the northwards of the Iland of S. Marten, in betwixt the foreſayd Iland and the mayne land of Poictou, you muſt goe in ſomewhat more northerly then the middle of the channell, or leave two third parts of the channell towards S. Martens Iland, and one third part towards the maine land. Alongſt by the Iland of S. Martens it is uneven, and ſomewhat full of bancks; come not to neare alſo the mayne land, for there lye off alſo ſome banckes, but you may borrow of them by your lead. Goe in alongſt, as before is ſayd, untill that the Church of S. Martin be ſouthſouthweſt from you, then you ſhall bee paſt the banck which lyeth north from S. Martens, and lyeth off from the ſhoare ſomewhat to the weſtwards of Saint Martens, that is, a hard ſteepe ſtony banke, which ſhowldeth up ſuddenly. For to avoyd it when as you muſt turne to and againe with an eaſterly, or a northeaſt winde, you muſt not bring the little Tower of Hars in the Village of Loy, but when the little Tower of Hars commeth to the firſt, or northermoſt houſe of Loy, then you muſt caſt about, for then you come againſt the bank, where remaineth at low water about a fathom depth, and at high water about foure fathom. When the foreſayd little Tower of Hars commeth againſt a mill which ſtandeth at the ſouth end of Loy, then are you within the banke, to wit betwixt the Bancke and S. Martins. When S. Martens commeth to be ſouthweſt and by ſouth, and ſouthſouthweſt from you, then you may boldly ſayle over the end of the banck towards S. Martins, you ſhal finde there at low water and ſpring tide at leaſt 3 fathom or ſixteene or ſeventeene foot, alſo one caſt or 2, but 12 foot then it is all ſoft ground, as alſo before S. Martens, but the bancks are hard, and with ſpring tides there remaineth litle water upon them. Before S. Martins you may anckor in 4, 5, or 6 fathom.

Marcks the bancks before S. Martens.

For to ankor before Saint Martens.

For to anckor before S. Martins, you muſt anckor ſo, that you may ſee open into the haven, and that the poynt of the Abbey, and the Boſſe doe ſtand the length of two capſtonebars one from the other, there it is with ſpring tides at low water three fathom and a halfe, but at high water ſix fathom and a halfe deepe.

When you ſayle into the Killiaets, as before is ſayd, it is 12, 11, and 10 fathom deepe, but being come ſo farre that the Tower of S. Martins beginneth to ſtandeth ſouthweſt from you, there it will be by little and little ſhowlder, and then you may well edge towards the Iland in five and foure fathom, it ſhowldeth then ſuddenly up, and will be from ten, quickly five, and foure fathom.

If you will goe over the banck that lyeth off from the Abbey with a ſhippe that draweth much water, then you muſt ſtay ſo long that it be halfe flood, for at low water there remaineth no more upon it then three fathom, or a foot or two more: when it is ſomewhat flowed, then you may well goe over with a great ſhippe. When the little tower of Huſſow commeth to the north end of the Iland Urck, or Tivalenes, then are you upon the ſhowldeſt of the banck, but when the little Tower commeth over the ſouth end of that little Iland, then it beginneth to deep againe.

The markes for to keepe the deepeſt water, when you run over the banck, are theſe: keep the great Tower of Rochel a handſpikes length to the ſouthwards of the wood of trees, which ſtandeth upon the northermoſt high land, and run ſo over the banck, it is there all ſoft ground.

If you will anckor before the Abbey within the bancke, then run in 6 or 7 fathom and anckor there.

But if you will not anckor under S. Martens, but wil ſayle forth towards Burnt Iland, then bring that foreſayd little tower of Luſſou over the little houſe that ſtandeth upon the little Iland Urck, and keep it ſo ſtanding, and then you can take no hurt of the Laverdyne.

Laverdin.

The Laverdyne is a rane of rocks together a musket ſhot long, which lieth off from the eaſt poynt of S. Martens Iland, about an Engliſh mile, and with ſpring at low water is uncovered Betwixt it and the Iland of S. Martens men may ſayle through, there is depth enough. The markes of the Laverdyne are theſe: When you come in at the Killiats, and ſayle through betwixt S. Martens Iland and the Boſſe, and you come to ſee the great Tower of Rochell even without the point of the Boſſe, then are you right thwart of the Laverdyne, which lyeth then ſ. w. from you, it is there betwixt them both not very wide: or elſe when the foreſayd great Tower of Rochel ſtandeth even without the point of Boſſe, and the North poynt of the Plom a ſhipes length without the ſouth poynt (which is the north poynt of the Boſſe) then are you right upon the Laverdyne, therefore when Rochel commeth a ſhippes length to the ſouthwards of the Boſſe (when you come in at the Killiats) then are you paſt the Laverdyne, and you may boldly goe on ſoutheaſt, and ſoutheaſt and by ſouth towards Burnt-Iland.

Porthus.

Porthus is a broad and wide channell, lying in through betwixt S. Martens Iland and Oleron, and lyeth from Uſe S. E. and by eaſt diſtant about 15 leagues. If you will ſayle into Porthus, then run in betwixt both lands E. S. eaſt, but much nearer S. Martens Iland, for to avoyd the Banck of Oleron, which is a foule ledge of rocks, at the N. end of Oleron, come no nearer it by night then in 12 or 13 fathom.

When you come then by the eaſt end of S. Martens Iland and are bound to Rochell, or elſe will anckor under the Boſſe bring that great Tower of Rochel a ſhips length without the Boſſe, ſo you can take no hurt of the Laverduyn. You may anckor under the Boſſe in 5 or 6 fathom ſoft ground, ſo that the poynt doe lye north from you. Or elſe if you will anckor under the Abbey of S. Martens Iland, then runne in upon the foreſayd marks, ſo long untill that the foreſayd Abbey come without the S. point of the ſame Iland, ſayle then right with it, and then you ſhall leave the Laverdyn farr enough on the larboard ſide of you. And being come neare the Abbey, anckor a little to the eaſtwards of it in 5, 6, or 7 fathom, there is the road for ſhips that are bound out.

When you goe into Porthus, and will ſayl to the Burnt-Iland, then runne in (as before is ſayd) untill you come neare the eaſt end of Saint Martens Iland: from thence the courſe is ſouth eaſt and by eaſt, or from the Boſſe ſouth or ſouth and by eaſt, or with a weſterly wind ſouth and by weſt unto that Iland.

Burnt Iland.

When you ſayle ſo neare that Burnt-Iland that the Tower of Voorn, or the Four, commeth over the Burnt-Iland, there you may caſt your balloſt over board, it is there 12 fathom deepe.

If you muſt turne to and againe with a ſoutherly winde from the Boſſe to the Burnt-Iland, or from Burnt-Iland to the Boſſe, then come not to neare the land of Rochell, there lye divers ſtony banckes alongſt the land, a good wayes from the ſhoare, whereof you muſt take heed. When Rochell is hidden behinde the ſouth poynt which lyeth over againſt the Creeke, there lyeth a ſtony bancke, upon which remaineth not a fathom of water.

If you will ſayle into the river of Sherrant, then runne about to the ſouthwards of Burnt-Iland, you may alſo ſayle about to the northwards of it, and ſayle in by the Tower of Voorn, or Four. At low water this river falleth dry, at leaſt 4 leagues within the land. For to ſayle from Burnt-Iland to Burwage, you muſt ſayle away S. S. E. and keepe the little Tower of Heers to the weſtwards of the wood, ſo long untill the tower of Voorn or le Four, come over the little red-tyled houſe, that ſtands upon the S. ſide of the river of Sherrant ſayle then in S. E. and by little and little S. E. and by eaſt untill that Front (a village that lieth upon the ſtrand) commeth to the N. wards of Soubiſe, when as then Soubiſe commeth within the foreſaid village, and the mill above the village, then you ſhall be againſt the poynt of Oyſterbanck, goe then in alongſt S. E. and by ſouth, and bring that outermoſt litle Tower of Heers, over the outermoſt ſandy place, where the gallowes ſtandeth by, keep them ſo ſtanding, and ſayle in ſouthſoutheaſt, when as then the little Tower of Heers commeth to the eaſtſide of the valley, which is in the wood, then keepe that ſharpe litle tower right over the eaſt ſide of the valley, of the wood, and ſayle in ſo into the Creeke, or river of Burwage. At Burwage was wont not to ſtand a houſe, where now is a ſtrong faire Towne, being builded ſo within 70 or 80 yeares paſt.

Oyſterbanck.

The Bannier lyeth alongſt the land of Oleron and lyeth untill within Burnt-Iland, at low water it is uncovered, and the tayle of it lyeth farre to the northwards. If you ſhould turn out from the Creek towards the Burnt Iland, then bring the Tower of Rochell not without the Burut Iland, before you come thwart of it, becauſe of the Baniard, and then you ſhall take no hurt of it.

At

Banjard.

At the ſouth end of Oleron, betwixt Oleron and the land to the ſouthwards of it, is yet another channell, where men may ſayle in and out, called the Mamme-ſound, deep enough for great ſhips, it lyeth in from out of the ſea eaſt and by N. being come there within, there runneth up a river ſoutheaſt towards Sales, where men doe lade ſalt, being paſt that, to the other poynt of the Mamme-ſound, lyeth a plate, whereof men runne to the northwards upon theſe marks: you muſt keepe the mill that ſtandeth upon the lands of Oleron over the trees, and ſo you ſhall run to the northwards off the plate, there is the road for them that wil lade ſalt at Oleron or Olderdorp.

Mamme-ſound.

But if you will runne in through, and out againe, then you muſt ſayle ſo farre to the eaſtwards, untill that Sales come over the trees, which ſtand within Merven, for to avoyd the tayle or riffe that ſhooteth off from Oleron: when Sales commeth over the trees, ſayle then north and by weſt on, to the Burnt-Iland, but bring Duke Charles Tower to the S. wards of the Burnt-Iland, for not to ſayle within the Banniard. When the little Tower of Heers commeth to the wood keepe it then ſo ſtanding untill Rochell commeth over the north ſide of the Burnt-Iland, ſayle then out at the Portruſh. There ſhooteth off alſo a riffe from the weſt-end of Saint Martens Iland, whereof you muſt take heed.

Riffe at S. Martens Iland.

About ſouth, or a-little more weſterly thirteene leagues from the Iland Uſe, ſouthweſt and by weſt from the Iland S. Martens, and W.N.W. or ſomewhat more northerly from the River, of Burdeaux, lye the Rockes of Rockedon, or Rochebon, of ſome called Urkamia, in forme of a Trevet or Brandize. The ſouthermoſt of the three is the ſhowldeſt, whereupon remaineth at low water about two fathom depth: At the ſoutheaſt ſide the ground is black little ſtones, and at the northeaſt ſide white ſand, but you may not come neare them by your lead ſound by them.

Rock of Rochebon.

A little to the weſtwards, not farre from the foreſayd rocks, lyeth yet another rock, whereupon is at low water 5 fathom water, nevertheleſſe with a ſtorme the ſea breaketh terribly upon it.

Of the depths and grounds about theſe places.

At Abberwrack and eaſtnortheaſt & weſtſouthweſt Moone maketh full ſea.

Without Vshant a weſtſouthweſt and eaſtnortheaſt moone, and within the Trade a ſouthweſt and by weſt moone maketh full ſea.

At S. Matthewes poynt, a ſourthweſt and northeaſt moon maketh higheſt water.

In the broad Sound, betwixt Vshant and the Seames a weſtſouthweſt and eaſtnortheaſt moone maketh the higheſt water: The floud falleth very ſtrong upon Vshant, and to the ſouthwards of it through the Mullens. Thwart over the Trade, towards the Backovens. Likewiſe in through the Broad Sound unto Breſt. Alſo alongſt by S. Matthewes poynt towards the Fourne, or Backovens, with very great rippeling. He that commeth ſayling about Vshant, muſt reckon thereupon.

In the Race of Fontenay a ſ. w. and by ſ. and n. e. and by n. moon maketh full ſea. The floud falleth very ſtrong thorow betwixt the Keyſer, ſomwhat thwart over towards the Lavender, with very great rippeling over the Calfe, (that is the ledge of Rocks, which lyeth off from the Lavender) and from thence forth n. and n. and by w. inwards to S. Matthewes poynt: With calms men muſt take very good heed not to be miſcaried away with the current. With ſtormy weather out of the n. or ſ. it is not without danger to come in this channell, eſpecially with an ebbe or out-fall.

On theſe coaſts of Britaigne, and the Iland thereabouts, a ſ.w. and n.e. moon maketh the higheſt water: but within the havens, rivers, indraughts, & bayes, a ſ.w. and by w. and n. e. and by e. Moone, or a poynt later, according as the havens or rivers doe lye deepe in the land. Men doe not reckon there any ſetting or running of the ſtreames, for the floud commeth (through the ſwelling of the great Ocean) right againſt the coaſts, and ſo runneth onely into the havens, the Ebbe contrariwiſe goeth thwart from the ſhoare to ſeawards, when it falleth: ſo that men cannot perceive any courſe off ſtreames except it bee a little through, or about ſome poynts off Ilands.

On theſe lands, as on all the coaſts off Britaigne, a northeaſt and ſouthweſt moon maketh high water, and within the havens, rivers and in-draughts, a poynt or two later according as they lye far within the land.

On the Coaſtes and Ilands a ſ. w. and n. e. moone maketh high water, within the havens and Rivers a poynt or two later, according as they lye farre within the land.

Of the Depths about the places, and in what depths men may ſee the land.

Thwart of Abberwrack 5 leagues from the land, it is deep 50 and 55 fathom.

The Backovens, or the land of the Fourne men may ſe in 50 fathom.

Vshant being about ſ. from you, you may ſee in 50 fathom.

Southweſt from Vshant 5 or 6 leagues off it is deepe 75 fathom, and then you may ſee the land from the poop.

In the Broad Sound it is 45 fathom.

A little without the Seames, about a league, it is deepe 50 fathom.

Men may ſee the Seames and the Sheete, or Slaeplaken, in 60 or 65 fathom.

Betwixt Vshant and the Seames in the fareway it is deepe 55 fathom.

Thwart of the Pennes and the Glanons men may ſee the land in 55 and 60 fathom.

Bell-Ile men may ſee from below in 55, but under the top in 60 fathom.

Without Vſe it is 35 fathom deep. and then men may ſee the land from below: when it is cleare weather men may ſee it in 60 fathom.

The land of Olone men may ſee it from below in 25 and 30 fathom.

S. Martens Iland and the north end off Oleron men may ſee in 28 and 30 fathom. When men get ſight off S. Martens Iland, they ſhall ſee upon it a high Tower, with a high houſe, and upon the ſtrand a mill with foure or five high ſand-hills. Vpon Oleron men ſhall ſee a high ſpire Tower, upon a red poynt, where men ſhall ſee ſome trees ſtand over it and to the ſouthwards of it, is at two or three places ragged ſand-hills.

How theſe lands doe lye one from the other, and from other lands.

From Ile de Bas, to the Fourne, weſtſouthweſt	16 leagues
From the Fourne to S. Matthewes poynt S.S.E. and S.E. and by S.	4 leagues
From S. Matthewes poynt to Croydon, or Claeſdowne E.S.E.	3 leagues
From S. Matthewes poynt to the Race of Fontenay, or the Keyſer, ſouth and by eaſt	5 leagues
From Vshant to Portland northeaſt	53 leagues
From Vshant to the Steart northeaſt and by north	40 leagues
From Vshant to the Lizart north	29 leagues
From Vshant to Silly northweſt and by north	37 leagues
From Vshant to Cape Cleare in Ireland northweſt	84 leagues
From Vshant to the Iland of S. Michaels, ſouthweſt and by weſt	360 leagues
From Vshant to the Cape Finiſterre ſouthſouthweſt weſterly	123 leagues
From Vshant to Ciſarga ſouthſouthweſt	77 leagues
From Vshant to Cape Prior ſouthſouthweſt	160 leagues
From Vshant to C. de Pinas ſouth	97 leagues
From Vshant to Laredo ſouthſoutheaſt	113 leagues

When men ſail away ſouth and by eaſt from Vshant, then they run a little without the Seames.

From the Race of Fontenay to the Pennes ſoutheaſt,	9 leagues
From Fontenay to Oldyarne eaſtſoutheaſt	3 leagues
From Oldyarne to the Pennes ſoutheaſt and by ſouth,	5 leagues
From the weſt end of the Seames to the Pennes E. S. E. ſomewhat ſoutherly	13 leagues
From the Seames to the Band or Crage of Oleron ſouthe. & by eaſt	112 leag
From the Seames to the Bayone in France ſoutheaſt,	112 leagues
From the Seames to S. Sebaſtians ſoutheaſt and by ſouth	112 leagues
From the Seames to Bilbaw ſouthſoutheaſt, eaſterly	130 leagues
From the Seames to Saint Andero ſouthſoutheaſt,	19 leagues
From the Seames to Cape de Pinas, or Tores, ſouth,	88 leagues
From the Seames to Ribadeus, ſouth and by weſt	93 leagues
From the Seames to Cape de Ortegall, ſouthſouthweſt ſoutherly,	90 leagues
From the Seames to Cape Finiſterre S.W. and by ſouth, ſoutherly	112 leagues
From the Seames to Silly, northnorthweſt	45 leagues
From the Pennes to the Glanons, the courſe is eaſtſoutheaſt	leagues
From Glannons or Gloyland to Groy, eaſt and weſt,	9 leagues
From the eaſt end off Groy to the weſt end of Bell-Ile, the courſe is ſouth-ſoutheaſt	5 leagues
From Glannons, or Gloyland, to Bell-Ile, ſoutheaſt and by eaſt	12 leagues
From the northweſt end of Bell-Ile to the ſoutheaſt end, the courſe is ſouth-eaſt and by eaſt	5 leagues
From the Pennes to Bell-Ile eaſtſoutheaſt	21 leagues
From the eaſt end of Bell-Ile to the eaſt end off the Cardinall, eaſt and by north	4 leagues
From the eaſt poynt off the Cardinall, to the entring off Morbeam northweſt	4 leagues
From the Pennes to Viverus, ſouthſouthweſt	88 leagues
From the Pennes to Ciſarga, ſouthweſt and by ſouth,	104 leagues
From Groy to Viverus, ſouthweſt and by ſouth	93 leagues
From Groy to Cape de Finiſterre, ſouthweſt	123 leagues
From Bell-Ile to the river of Bourdeaux, ſoutheaſt	50 leagues
From Bell-Ile to S. Sebaſtians, ſouthſoutheaſt ſoutherly	80 leagues
From Bell-Ile to S. Andero, ſouth	73 leagues
From Bell-Ile to C. de Pinas, or Tores ſouthſouthweſt,	80 leagues
From Bell-Ile to Cape de Ortegall, ſouthweſt,	90 leagues
From Bell-Ile to Cape de Finiſterre, ſouthweſt	123 leagues
From the eaſt poynt of the Cardinall to Croſwyck, eaſtnortheaſt	5 leagues
From the poynt of Croſwyck to Piere-Perce, eaſtſoutheaſt	3 leagues
From the Cardinall to Old-downes, eaſtnortheaſt	7 leagues
From the north point of the River of Nantes, to the Picqueliers, E.S.E.	7 leag.
From Pierremen to Armentiers weſtſouthweſt	2 leagues
From Armentiers or Pickeliers to the weſt end of Vſe, ſouth and by eaſt and ſouthſoutheaſt at laſt	7 leagues
From the eaſt end of Bell-Ile to Vſe, ſoutheaſt eaſterly	16 leagues
From Vſe to the Barges of Olone, eaſt and by ſouth	7 leagues
From Vſe to the Killiates, or S. Martens Iland, eaſtſoutheaſt	12 or 13 leagues
From Vſe to Cape de Pinas, ſouthweſt and by ſouth	75 leagues
From Vſe to Cape de Ortegall, ſouthweſt and by weſt,	93 leagues
From Vſe to S. Martins Iland, or the Killiates, the courſe is E.S.E.	12 or 13 leag.
From Vſe or Portrush, or the Band of Oleron, the courſe is ſoutheaſt and by eaſt	15 or 16 leagues
From the Band or Craghe of Oleron to the Tower of Cordan ſouthſoutheaſt and ſouth and by eaſt	13 leagues
From S. Martins Iland to the tower of Cordan, or the river of Bourdeaux, S.S.E.	16 leagues
From S. Martens Iland to Cape de Pinas, ſouthweſt,	80 leagues
From S. Martens Iland to Ortegall, the courſe is weſtſouthweſt ſomwhat ſoutherly	99 leagues

Heights.

Vshant lyeth in	48 degrees 30 minuten
The Seames lye in	48 degrees 5 minuten
The Iland Bel-Ile lyeth in	47 degrees 50 minuten
The Iland Vſe in	46 degrees 48 minuten
The north poynt of Oleron in	46 degrees 15 minuten

How theſe Lands doe ſhew themſelves at Sea.



When Ushant is ſouth and by weſt from you 4 leagues, it ſheweth it ſelfe in this forme



When Ushant is northnortheaſt from you, it ſheweth thus.



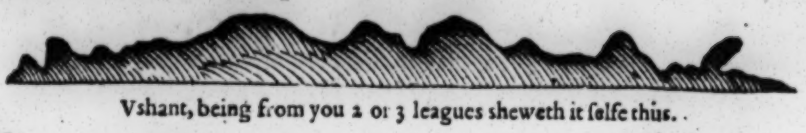
Vshant, being ſouth and by eaſt from you 4 leag. ſheweth it ſelfe thus.



Vshant, being ſouth and by eaſt from you 3 leagues, ſheweth it ſelfe thus.



Thus sheweth Vshant, being ſoutheaſt from you 4 leag.



Vshant, being from you 2 or 3 leagues sheweth it ſelfe thus.

Fontenay. Oldyearne. The Pennes.



Thus sheweth the Sheets, or Slaeplakens, with Pennes, as you ſayle alongſt by them, and that they are about 4 leagues thwart from you.



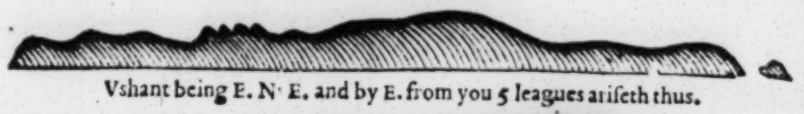
Vshant, being E. & by S. and E.S.E. 3 or 4 leag. from you, sheweth it ſelfe in this forme.



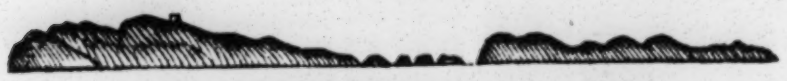
Thus sheweth Vshant, when it is E. and by S. from you 4 or 5 leagues.



When Vshant is 4 leagues eaſt from you, it ariſeth in this forme.



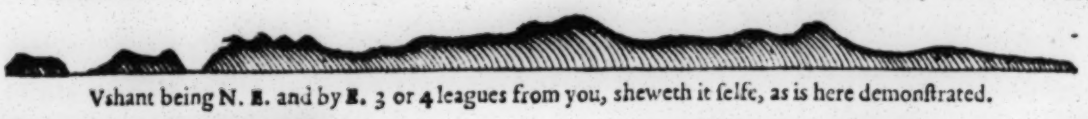
Vshant being E. N. E. and by E. from you 5 leagues ariſeth thus.



Vshant, being E.N.E. from you 2 or 3 leagues, sheweth it ſelfe thus.



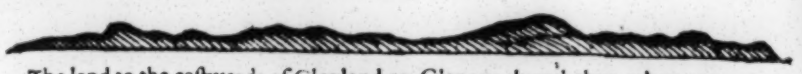
Vshant being eaſtnortheaſt and by eaſt from you, ſo farre as you may even ſee it from below, ariſeth in this forme.



Vshant being N. E. and by E. 3 or 4 leagues from you, sheweth it ſelfe, as is here demonſtrated.



Thus sheweth the land of Glanons, when you ſayle alongſt by it.



The land to the eaſtwards of Gloyland or Glanons shweth thus, when you ſayle alongſt by it.



Thus sheweth the weſt poynt of Groy, when it is three or foure leagues northeaſt from you.



VVhen the Tower of the Iland S. Marten is eaſtſoutheaſt 3 leagues from you, then the land sheweth thus.



When Groy is northnortheaſt from you 4 leagues, it sheweth thus.



Thus ariſeth Bell-Ile, when the N. W. end is eaſt from you 4 leagues.



VVhen Bell-Ile is northeaſt from you 4 leagues, it sheweth thus.



When the northweſt poynt of Bell-Ile is eaſt and by north from you 4 leagues, and the ſoutheaſt poynt is eaſt and by ſouth, and eaſt ſoutheaſt, then it sheweth thus: when as you ſayle towards it, and you come neare the land, then the peeces which lye off from the northweſt end, at laſt come to be faſt unto Bell-Ile.



Heys, being ſoutheaſt and by ſouth from you, that a man may ſee it from the Compague, sheweth out of the Marſſe thus,



Heys, being noftheaſt from you, sheweth thus.



Thus sheweth the land Vſe or Heys, when you ſayle alongſt by it, being two leagues off from it.

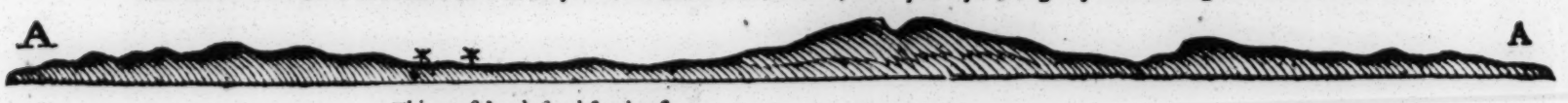
Olone.



Heys being E.S.E. from you, and that a man may ſee the tower from the Compagne sheweth thus; and you are then upon 31 fathom depth.



Thus sheweth the Land of Poictou betwixt Heys and the Ilands of S. Martens, when you ſayle alongſt by it foure leagues a ſeaboard the Land.



This coaſt lyeth ſouthſoutheaſt.

Thus sheweth the weſt end of the Ilands of S. Martens.



This belongeth to the former figure from the weſt end of S. Martens Iland, and sheweth it ſelfe thus, when the ſteeple is eaſt and by ſouth from you 3 or 4 leagues of, the coaſt lyeth here eaſtſoutheaſt, and weſtnorthweſt,

La fos de Loys. S. Marten. Abbey. S. Iohn.

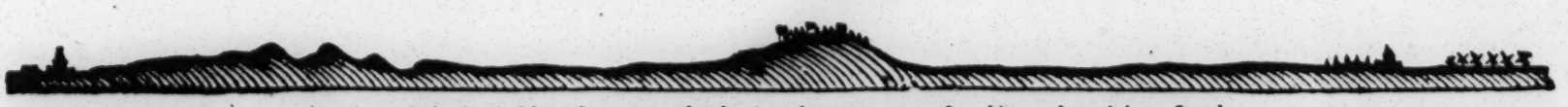


VVhen S. Martens Iland is north and by eaſt from you it sheweth it ſelfe thus.



VVhen men ſayle out or in at Porthus, S. Martens Iland sheweth it ſelfe in this forme.

S. Martens. S. Maria.



Thus sheweth the ſouth ſide of S. Martens Iland, when the Tower or weſt end is north, and the eaſt end northeaſt three or foure leagues of from you.



The weſt poynt of Oleron, or Olderdon, sheweth it ſelfe thus, when it is eaſt from you two great leagues. Thereabouts it is twenty fathom deepe.

Olderdon

7

Costez de France & de Biscayen depuys la Reviere de Bourdeaux jusques a Ribadeux

Duytsche mylen 15 in een graadt — Lieues d'Allemaigne 15 en un degre
Spaansche mylen 17½ in een graadt — Lieues d'Espaigne 17½ en un degre
Engelsche en Fransche mylen 20 in een graadt — Lieues Angl. et Franc. 20 en un degre

Rivier van Bourdeaux

Bilbao

B I S

Portogalette

Barsi

Placentia

Orio

S. Sebastiaen

Bayonne

C. de Machicao

Rio de Sella

Lhiones

Sansoen

37

De
Custe van
Vranckrijck
Tusschen
De Riviere van
Bourdeaux en
S. Sebastiaen

R A N C R Y C K

Bayonne

S. Jan de Luz

Caye Neuve

S. Anna

Pinas de
S. Anna

C. Figuier

S. Sebastiaen

De Custe van Biscaÿa
Tusschen S. Sebastiaen
en de Reviere van Lhianes

S C A I A

Laredo

Orinugan

S. Andreo

Lalata

N. S. Antony

Espinosa

S. Lucia

S. Martin
Setevilles

S. Vincente

S. Alua

Lhianes

C A I A

De
Custe van
BISCAYEN
Tusschen Lhianes ende
de Reviere van
Ribadeus

Castrapol

Ribadeus

't Landt
van Artedo

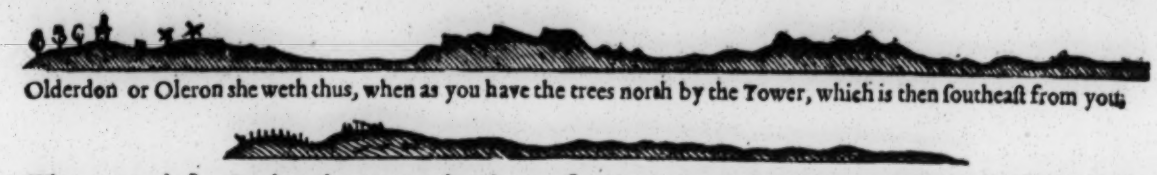
Lugar

Avilés

C. de Pinas

BRIT
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MUSEUM

Down. Downyland.



Olderdon or Oleron she weth thus, when as you have the trees north by the Tower, which is then southeast from you.

When you are before Porthus, about two or three leagues from land, then doth Oleron and Olderdon arise in this forme.

The land betwixt Olderdon and the river of Bordeaux sheweth (when men sayle alongst by it) as is portrayed in these five following figures, the letters of one sort belong one to the other, as AA, BB, CC, DD.

The Iland Olderdon.



A Sales.



Thus sheweth Sales, when it is east and by north from you, being about a league without the land.

B C



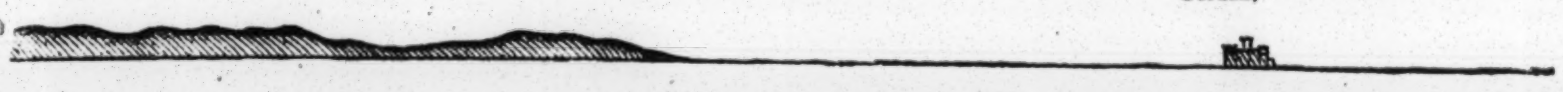
High sand-hil.

C D



Gordan.

D



The second Demonstration,

Which containet the description of the River of Bordeaux to Ribadeaux.

FROM the Band off Craghe off Oleron to the Tower of Cordan, or the Pole head, or the mouth off the River off Bordeaux, called the Garrone, the land lyeth southeast, and southeast and by east 13 leagues.

To the northwards of the mouth of the river of Bourdeaux, lye five or six high white Sand-hilles, but to the southwards off it, it is somewhat low land, blacke little Sand-hilles, being growne with spiry grasse.

From the Tower of Cordan off to the northwards, towards the high Sand-Hilles, which lye upon the north land lyeth a Piper. sand-bancke, called the Piper, men may sound alongst by it on the west side in seven fathom, but upon the northend it is very steepe, and not farre off it is twenty fathom deepe.

From the north-poynt off the River runneth off to the Norther and souther Asses. southwards, a sand called the norther **Asses**, and to the southwards of it lyeth another sand, called the souther Asses, thorow betwixt them both, and also alongst to the southwards of them, men may sayle into the River.

If you will sayle into the River comming from the northwards, then you may run alongst by the shore in 12 and 13 fathom, untill that the tower of Cordan stand southeast and by east from you, runne then right in with it, through betwixt the norther and souther Asses, untill that the high white sand-hil upon the north point of the river stand northnortheast from you, men may so (comming from the northwards) runne in also about by the norther Asses, by your lead, untill that the Tower come to be southsoutheast, and southeast and by south from you, then goe towards the Tower, and when the foresayd high sand-hil come to be northnortheast or northeast and by north from you, sayle then right in with it, untill that you have the sounding of the land, run then in alongst by it, towards Messie, that is the point where all the mils stand. When you shall saile thus towards the high sand-hill, and that the Tower of Soulack commeth a great fathom to the northwards of the Tower of Cordan, and the little mill of Royan then are you also past the Piper, and may run in right east without feare Royan. towards Royan, but you must reckon well your tyde, for the flood falleth thwart over the Asses towards the Tower off Cordan, and the ebbe in the contrary.

In this foresayd channell through betwixt the Asses remaineth at low water 3 fathom water upon the showldes.

For to sayl into the river alongst to the southwards of the Asses, comming from the northwards, (that is, the best channel) you must do thus: Bring the Tower of Soulacke east from you, or somewhat more northerly, and sayle in so right with it, untill the tower of Cordan be north and by east, and northnortheast from you, Royan shall then stand northeast from you, or else if you come from the southwards, then bring the tower of Cordan north and by east, and N.N.E. from you, and sayle in so right with it, untill Soulack come to be east from you, Royan shall then stand N. east from you, sayle then right towards it, and comming neare it, sayle to the point of Messie.

When you are now within the Rivers mouth, and come right against the point of Messie, that is the point where the Mills stand upon, then edge over towards the broken Castle, called Chastillion, southeast and by south, that is, eight leagues Chastillion. from Messie, and then forth in alongst by the south land, southeast in unto Pouliack, which is two great leagues. Pouliack.

In the fareway betwixt the Piper and the poynt with the Mills, or Messie, it is 10, 11, and 12 fathom deepe, but out of the fareway, either on the north side, or south side, it is showldy) to wit, 5, 6, 7, and eight fathom, you must runne alongst close by the poynt of Messie, there it is 22 fathom deep.

When as that Royan commeth to the west poynt, whereupon the mils stand, keep it so standing, and go away southeast and by south towards Chastillion, it is in this fareway allmost all alongst 5 fathom deep, but comming neare the north or south side, it is showldy, and at the north side it is full of sands, where also men may well sayle through that are acquainted.

From Chastillion to Pouliack it is 2 great leagues S. east, Pouliack. the course is as before is sayd, and it is there deep 4, 5, 6 & 7 fathom. Over against Pouliack in the midst of the River lyeth a little Iland to the eastwards, men must runne about it, right in with Bloy, but there men must goe over with the tyde, for it is there at low water but a little more then one fathom deep.

When you are before Poulick, and will sayle to Bloye, then let the water first flow an houre, and then you may well goe over with a ship that draweth nine or ten foote water. The markes for to sayle alongst in the deepest water of this reach, are these: there standeth a Mill halfe waies betwixt Bloye and Rocktaw, keepe that without the new wall of Bloye, and then you shall run in the deepest of the Channell.

Before Bloye it is againe three or foure fathom deepe, Bloye. runne then alongst by the north land in three, foure, and five fathom. When you come before the River which lyeth up to the eastwards called Dordoigne, then sayle first right with the middest of the second Iland, and leave it on the starboard side, and go indifferent neare alongst by it, untill that you be over against or past the Gollowes, which standeth upon the east poynt of the River: and then againe alongst by the northland unto the foure little houses. From thence you must edge over to the high Tower of Dublot or Pigeonhouse, comming thwart of it, you must presently edge over again to the east side, to the hight neare Lermond; in

that edging over, you ſhall rinne through betwixt a ſtone banke on the larboard ſide, and a ſhowld ſand-plate on the
The Pace. ſtarboard ſide, over a banke called the Pace, which is the ſhowldieſt of all the river, there remaineth at low water a little leſſe then a fathom. Being come over the Pace to the eaſt ſide, goe then in alongſt by the eaſt ſhore, untill you be paſt Lermond, then ſaile againe over to the weſt ſide, right with the houſes of Charterhouſe, and then in all alongſt by the weſt ſhore, untill you come before the towne of Bordeaux, in that crooked reach betwixt Larmondt and Charterhouſe it is 5, 6, and 7 fathom deep, and before the town 4 and 5 fathom.

When men will ſayle out of the river of Burdeaux, they muſt ſtay at Royan untill the have good weather, and a fore-ebbe to run out with: in running out, keepe the high ſand-hill northnortheaſt from you, ſo long untill that the tower of Cordan be ſoutheaſt and by eaſt from you, then you may ſayle out through the Aſſes northweſt and by weſt into ſea.

From Cordan, or the river of Burdeaux, unto Arcachon, the coaſt lieth ſouth and north twenty leagues, it is all low ſandy land, betwixt them both lyeth a tyde-haven called Anchiſes, men may go in there well at high water with great ſhips.

Arcaſon. Before the haven of Arcachon, or Arcaſon, lie three ſhowlds, men may ſayle into the northwards of them, and alſo into the ſouthwards of them: the norther entry goeth in betwixt the north poynt and the northermoſt ſhowld, but it is narrow and not deep. The ſouther entrey lyeth to the ſouthwards of all the ſhowlds by the ſouther poynt, in betwixt two ſhowldy ſand-banckes, whereof the one lieth off from the ſouthermoſt ſhowld, and the other from the ſouth point of the maine land, ſouthweſt and by weſt into ſea. The land to the northwards of this haven is altogether ſomewhat low ſandy land without trees, but to the ſouthwards of it there are all ſomewhat high ſand-hills without trees alſo, but comming before the havens mouth, you ſhall ſee within in the land many trees. When you come out of the ſea either from the northwards or the ſouthwards, neare about this havens mouth, you ſhall eaſily eſpy the foreſaid bankes on both ſides of the ſouther entrey, by the breaking of the ſea, and you may borrow of them by your lead, as neare as you pleaſe, they are very cleane and flat. Upon the ſandhils within the havens mouth, ſtand two great high
For to ſail into the haven of Arcaſon. maſts. If you will ſayle in there, then bring the two Maſts one in the other, and then they ſhall ſtand northeaſt and by eaſt from you, keepe them one in the other, and ſayle in ſo right with them, and you ſhall ſo ſayle in betwixt the two foreſayd bankes, and at low water you ſhall not finde leſſe then two fathom water, but at high water you ſhall have five and a halfe, and fixe fathom water, go in ſo upon the markes, untill you come within the ſhowlds, and to the end of the ſhowld-ſand on the larboard ſide. Being gotten in within it, you muſt luffe up about by it, and goe then on north untill you come to the poynt, which you ſhall ſee on the ſtarboard ſide, but give that a birth, becauſe there runneth off a tayle, there is in that reach no leſſe then ten, eleven, or twelve fathom deep. Being come about that poynt, you may then ſayle in cloſe alongſt by the land on the ſtarboard ſide, which lyeth eaſtſoutheaſt, or you may anckor there in ſixteen, fifteen, twelve and ten fathom, or further in about the ſecond poynt, in two and three fathom. Over againſt the firſt point, on the north ſide, it falleth very far dry, a great waies within.

Bayone. From Arcaſon to Bayone, the coaſt lieth ſouth and north ſixteen or ſeventeene leagues. The Rivers mouth of Bayone lieth in betwixt two plaine ſtrands eaſtſoutheaſt, and eaſt and by ſouth, and ſometimes more eaſterly or northerly, by reaſon of the ſhifting and altering of the ſands before the Rivers mouth. Upon the land on the ſouth ſide of the channel, ſtand two maſts, theſe you muſt keepe one in the other, or the innermoſt a little to the northwards of the outermoſt, and run ſo in over the Barre or ſhowldieſt place, untill you come againſt the ſouth point, and then in alongſt by it. Upon the foreſaid Barre is at high water and Spring tyde, at leaſt three fathom, with an ordinary tyde two fathom and a halfe, but at low water no more then 3 foot water. When you come about the point, you muſt ſayle up to the ſouthwards, keeping about the middle of the channell alongſt the river, or rather neareſt the weſt ſide, for to avoid ſome foule ground and ſhowlds, that lie on the eaſt ſide, and anckor before the town in 4, 5, or 6 fathom. This Bar and this River is Pilots water.

A little within this Barre on the north ſide of the river lieth up to the northwards a great water within, of 7 leagues long, and falleth out into Sea by Cabritton. Alongſt that great water the ſhips were wont to ſayle up to Bayone, but it is now upon the ſouth end at the river of Bayone almoſt altogether paled too, ſo that there can but ſmall barkes goe through, for to keepe the better the Barre of Bayone deepe with ſcowring through of the water.

From the Barre of Bayone to S. Iohn de Luz, the courſe is ſouth and by weſt 4 leagues, there is a faire Bay where men may ride in five, ſixe, ſeven, or eight fathom, according as they will lye farre in, cleane ſandy ground, at the end of the Bay is a little tyde-haven, where upon lyeth the towne on the weſt ſide. At high water, and with an ordinary tyde, there cometh nine foote, but with a ſpring twelve foote water, at low water it falleth altogether dry, ſo that men may goe over there with drie feete. A litle within the weſt point of the Bay is alſo a little Dock, where there is a foot water more then in the foreſayd tyde-haven, but it falleth alſo dry at low water.

This Bay is very good to know by theſe marks that hereafter are written: It lyeth right in the Bight, to the eaſtwards of it lyeth the land north and by eaſt towards Bayone, and to the weſtwardes of it the land falleth away ſouthweſt and by weſt, and ſouthweſt towards Fonteravia. Upon the eaſt point of the Bay ſtandeth a white Fire-tower, which men may ſee farre off, eſpecially when the Sunne ſhineth upon it, then it ſhineth very white more then the other land. Upon the weſt poynt ſtandeth a flat white houſe a little wayes upon the high land, and to the weſtwards of the Bay it is upon the ſea ſide gray and blewiſh land. Alſo the high hill of S. John de Luz, is a good marke for to know this Bay, which remaineth in ſayling in, lye ſomewhat to the eaſtwardes, or on the larboard ſide. This foreſayd hill of S. John de Luz ſheweth it ſelfe out in height above all other hilles thereabouts, and thereby is very goed to be knowne: above upon the top it it ſomewhat flat, as is demonſtrated in the riſing of the lands. Upon this foreſayd hill ſtandeth a Chappell, from whence men may ſee into foure Kingdomes: France, Spaine, Navarre, and Arragon.

About two leagues ſouthweſt and ſouthweſt and by weſt from S. John de Luz, lye the rocks called the Pignons of S. Anna, not farre from land: a league to the weſtwards of them, lyeth the Bay of Fonteravia, being a faire Bay. Pignons of S. Anna.

At the weſt poynt of the Bay lyeth the C. Figuer, a high poynt, upon it ſtandeth a caſtle, an to the ſouthwards of it a little chappell. At the poynt of this cape lyeth a rock a little wayes from it, but the ſea cannot run through betwixt them, except it be with very high floods, it breaketh a little through. At the eaſt ſide of this bay lye two high rocks, and thwart of them lye alſo ſome low rocks a good wayes off from the land. For to avoyd them you muſt ſayle in by the weſt poynt for to come into this Bay, and being within it, you may anckor in eight or nine fathom, but ſo that the foreſayd great rock at the C. Figuer ſtand north n.w. from you, there you lye in faire ſandy ground, and landlockt for a northweſt winde. The Kroonenbrough lyeth about halfe wayes betwixt S. John de Luz and this foreſaid Bay of Fonteravia. Kroonenbergh.

Paſſagie. A little league to the weſtwards of C. de Figuer, lyeth Paſſage alſo a faire haven. At the weſt ſide of the havens mouth, which is verry narrow, lyeth a round rock, ſo that it is evill to come in there with an ebb, but with a flood it is better, without it is very cleane, without any ſhowlds or fowle grounds but onely the foreſayd rounde rocke. The towne lyeth a little within the haven on the weſt ſide, where men doe lye before it in 7 fathom.

S. Sebaſtians. Two great leagues to the weſtwardes of Paſſage, lyeth S. Sebaſtians, betwixt both is alſo a ſand-bay in a bight, where there goeth up into the land a ſhowld little river, where come in many Barkes.

The haven of Saint Sebaſtians is good for to come into, men doe runne in there betwixt two little caſtles, whereof the eaſtermoſt is the great, ſtanding upon a high hill. The weſtermoſt is a little ſquare tower, and lyeth upon a little Iland, or rock. In the havens mouth being narrow, betwixt the two foreſayd little Caſtles, lyeth a rocke, which at low water is ſixe fathom deepe, and when it is a ſtorme out of the ſea, it breaketh allwayes upon it, and lyeth neereſt the eaſt-land, by the weſt-land it is deepe ten fathom. Now for to avoyd the foreſayd rocke in comming in, there commeth an Abbey to the eaſtwards of the weſtermoſt Iland, and a little Tower. If you keepe them one in the other, then you run into eaſtwards of it.

For to anckor without S. Sebaſtians in the road, you muſt keepe the high hill which lyeth upon the poynt of Cape Figuer, without the foreſayd eaſtermoſt caſtle, there you may anckor, but if the ſame come to be hidden behind the caſtle or Iland, then you may not anckor in the road of Saint Sebaſtians. When you are come through the narrow within the rock and the caſtles, then you may anckor at the eaſt ſide under the great caſtle, there is the beſt road. Within the foreſayd caſtle

caſtle goeth up a little water, men may goe at low water a foot from the eaſter caſtle alongſt a high ſtrand upon the maine land, unto the Towne, which lyeth behinde the foreſayd high hill with the Caſtle, yet the ſtrand at high water is covered; it is a bay, and within before the towne it is deepe five, ſixe, and ſeven fathom, at the weſt ſide under the little Iland, men may not anckor, becauſe it is flat and ſhowld there.

He that will goe forth from thence into S. Sebaſtians, let him run in, keeping the middle channell, betwixt the two Ilands, and let him leave the little Iland where upon the chappel ſtandeth on the ſtarboard ſide, running in ſo right againſt the firſt or the ſecond wall of the towne, and anckor there, the bots or ſhallops ſhall come aboard of him, and helpe him into the haven betwixt the walles.

A league to the weſtwards of S. Sebaſtians, lyeth a ſandbay, where men may anckor ſo deep and ſo ſhallow as they will.

Gateria. From S. Sebaſtians to C. de Martinchaco, the courſe is W. N. W. 13 leagues. Betwixt them both lye the roades Gateria and Deva.

Gateria lyeth from S. Sebaſtians weſt and by north, and W. N. W. diſtant 8 leagues, being a faire round ſand-bay, where is good riding for weſterly winds, men lye there within the weſt poynt right before the Towne, in faire ſandy ground, a north winde commeth right from the poynt. This bay is commonly called Kings-haven.

Alongſt the coaſt of Biſcay, betwixt S. John de Lua and Gateria is every where clean ground and good anckoring in 20 fathom.

From Gateria to Deva it is a league and a halfe to the weſtwards: which is an off-water that cometh out of the high-land.

Two leagues to the weſtwardes lyeth the poynt of Cape Martinchaco.

Barmea. About thirteene leagues weſtnorthweſt from S. Sebaſtians, lyeth the Cape de Martinchaco, a little to the weſtwardes of it is a good tyde-haven, where in lyeth a little Towne about a league within the land, upon a river which commeth out of the high land. A little to the weſtwards of Cape de Martinchaco, lyeth a great rock faſt to the land, and a little to the weſtwards of the ſame, another: upon the poynt called Punte de A villanes. Southweſt and by weſt from Martinchaco lyeth the haven of Barmea, a faire great Bay, the eaſter poynt is foule, therefore men muſt give it a good birth, and run in alongſt by the weſt ſide, when they are gotten in it is large enough, there they may anckor where they will.

Placentia. To the weſtwards of Barmea, lyeth alſo Placentia upon a little River, the towne lyeth a litle within the land. There are all tyde-haven.

From Cape de Martinchaco to Bilbao, (where betwixt lye the foreſayd havens of Barmea Placentia) it is ſouthſouthweſt and ſouthweſt and by ſouth 7 leagues.

Bilbao. From Placentia to Bilbao it is two leagues weſtſouthweſt and weſt and by ſouth. Bilbao lyeth upon a great river, alongſt which there commeth of much Iron, it is a good haven, but it lyeth not farre in, by reaſon of the Barre which lyeth thwart over the haven, where men muſt goe in with high water.

At the eaſt poynt of Bilbao ſhooteth of a riffe, which men muſt avoyd, there lye alſo ſome rockes under water. It is a high ſteepe poynt, and is white to ſee to.

Within the riffe that runneth off from the poynt, men may anckor in ſeven and eight fathom, betwixt the poynt and the Piere on the eaſt ſide, there the Pilotes come off which bring up the ſhippes; and there men may lye land-lockt for a northweſt winde. From this foreſayd poynt or road to the Barre or river mouth of Bilbao, it is a league and a halfe ſouth and by weſt, which lyeth in by the weſt land, there ſtand five or ſixe houſes upon the weſt land, when the two weſtermoſt houſes come one in the other, or when you may ſee through the two eaſtermoſt houſes, which ſtand within in the land, then are you upon the Bar or ſhowld, then goe in ſouth, and ſouth and by eaſt right with the Caſtle Portugaletto, and alongſt cloſe by the Caſtle, and anckor a little within the Caſtle for a weſt winde. But when you are before the Barre, the Pilotes come off and bring you to the Town.

When you lye without in the Bay, then you may ſee Mount Anthony lie weſt and by north from you.

Caſtro. From the poynt of Bilboa to Caſtro, the courſe is weſt five leagues, that is a good haven for ſixe, ſeven, and eight fathom depth. The narrow of the haven lieth in ſouth, in 10 fathom. But further in the river towards the towne, it is not deeper then 3 or 4 fathom.

S. Anthony. From Bilbao to the hill of S. Anthonies, it is weſt and by north nine or ten leagues. From Caſtro to Laredo, the courſe is weſt diſtant five leagues, upon the weſt ſide lyeth the foreſaid hill of S. Anthonies, which is a high hill, men may ſayle in cloſe alongſt by it, untill they come about the eaſt poynt; within it is wide and broad, and a fit haven for great ſhippes, there men may anckor in ſeven or eight fathom. To the eaſtwards over againſt the hill of S. Anthonies, in the middeſt of the ſound, lyeth a rane of rockes under water, where men may ſayle in about it on both ſides, men may eaſily eſpy them, becauſe it doth alwaies breake upon them, within them is the road for ordinary ſhips, a little before the haven, which is built with a wall: but the great ſhippes lye a little further off in 6 or 7 fathom depth. On the ſouth ſide of the haven is a little tyde-haven, from the ſame there commeth a great riffe ſhooting off from the eaſt ſide, towards the hill of S. Anthonies; within it is two fathom water right before the village, from the village commeth a tayle of ſand, lying thwart out, within it at low water it is a fathom deepe. In the middeſt of the ſound it is nine fathom, and at the poynt of Saint Anthonies 20 fathom deep. Sunken rocks.

From S. Anthonies hill to Cape de Keſgo it is weſt and W. and by ſouth two leagues, that is a great Cape lying to the eaſtwards of S. Andero: thwart of it is clean ground. C. Keſgo

From Cape de Keſgo to the weſt poynt of S. Andero, it is weſt and by ſouth five leagues, a little to the ſouthwards of the poynt of S. Andero, upon the eaſt poynt of Sardinis, is a ſandbay, there is good anckoring in ten fathom. S. Andero

From C. de Keſgo to the haven of S. Andero, the courſe is W.S.W. diſtant 2 great leagues. S. Andero lyeth within a Bay, there lyeth an Iland before the haven, men may goe about it on both ſides, it is deepe 8 and 9 fathom; but to the ſouthward of the Iland it is deep, 5, 6, and 7 fathom, according as men will come neare to the ſtrand, the haven lyeth in firſt W. N. weſt. The Iland lieth a great league within the bay: from the eaſt point of the haven, unto the weſt point of the land, it is ſouth and north about a great league. S. Anthonies and the weſt point of S. Andero, lie one from the other eaſt and weſt, about 5 leagues.

Laredo. For to know the land when you fall with the land about Laredo, you muſt know that on the weſt ſide of the haven of Laredo, lyeth the hill of Saint Anthonies, which is a very high hill, which men may ſee very farre from the eaſt and the weſt, and a little above the towne of Laredo, men may ſee alſo a ſharpe hill like the poynt of Diamont; or the poynt of a two hand ſword, further it is about Laredo very high double land, two, three, and at ſome places foure double. The hill of S. Anthonies doth ariſe in two high hommockes, with a valley or ſaddle in the middeſt betwixt them both; within in the land lye alſo two high hills with ſharpe toppes. Above and to the wwards of S. Anthonies, lyeth a piece of land about two leagues long by judgement, which lyeth in five hills, the eaſtermoſt is the loweſt, and riſe all higher & higher towards the weſt, ſo that at the laſt to the weſtermoſt is the higheſt, which goeth off ſomewhat flat downwards towards the weſt. Betwixt that eaſtermoſt hil & S. Anthonies, lyeth a bay about a league long, called the Bay of Port, men cannot ſee theſe foreſayd hills when they are cloſe by the land, but they muſt be a good wayes off to ſeawards. To the weſtwards of theſe foreſayd hills lyeth an other peece of land, which at the eaſt end is higheſt, and goeth ſloping off towardes the weſt end, allmoſt like Portland. Betwixt that poynt and the five foreſayd hills, lyeth an other ſand-bay, where abouts ſtand ſome litle houſes, but by it lye many rockes and fowle ground. Thereabouts within the land lyeth the foreſayd high round ſharpe hill in forme like the poynt of a ſword. Bay of Port.

S. Andero hath but few hills that are good to bee know, but when men are before the haven, then they ſhall ſee to the eaſtwards of the towne, a Caſtir upon a high hill, in forme like a Sugerloafe, or a bey-crock, and to the eaſtwards of it is much double land of two and three height double. But when men come about the Cape de Keſgo, then they ſhall ſee preſently the caſtle upon the weſt land.

From S. Andero to Cape de Pinas, the courſe is weſt or a little more northerly 38 or 39 leagues. Betwixt them both ly theſe havens following.

S. Martin Settevils. Firſt the haven of S. Martin, or Setteviles, a tyde-haven lying eaſt and weſt 4 leagues from S. Andero.

S. Vincens From thence to S. Vincent alſo a tyde-haven is five leagues diſtant: the haven goeth in on the eaſt ſide; from the weſt ſide commeth ſhooting off a little river, and in the midſt of the havens mouth lyeth a little Iland, where men may goe in on both ſides.

Lhanes. From S. Vincent to Lhanes, a tyde-haven, the courſe is W. 2 or 3 leagues. Upon the weſt ſide of the haven ſtandeth a little Church: and a little within the haven, lyeth a middle

that edging over, you ſhall runne through betwixt a ſtone banke on the larboard ſide, and a ſhowld ſand-plate on the
The Pace. ſtarboard ſide, over a banke called the Pace, which is the ſhowldieſt of all the river, there remaineth at low water a little leſſe then a fathom. Being come over the Pace to the eaſt ſide, goe then in alongſt by the eaſt ſhore, untill you be paſt Lermond, then ſaile againe over to the weſt ſide, right with the houſes of Charterhouſe, and then in all alongſt by the weſt ſhore, untill you come before the towne of Bordeaux, in that crooked reach betwixt Larmondt and Charterhouſe it is 5, 6, and 7 fathom deep, and before the town 4 and 5 fathom.

When men will ſayle out of the river of Burdeaux, they muſt ſtay at Royan untill the have good weather, and a fore-ebbe to run out with: in running out, keepe the high ſand-hill northnortheaſt from you, ſo long untill that the tower of Cordan be ſoutheaſt and by eaſt from you, then you may ſayle out through the Aſſes northweſt and by weſt into ſea.

From Cordan, or the river of Burdeaux, unto Arcachon, the coaſt lieth ſouth and north twenty leagues, it is all low ſandy land, betwixt them both lyeth a tyde-haven called Anchiſes, men may go in there well at high water with great ſhips.

Arcaſon. Before the haven of Arcachon, or Arcaſon, lie three ſhowlds, men may ſayle into the northwards of them, and alſo into the ſouthwards of them: the norther entry goeth in betwixt the north poynt and the northermoſt ſhowld, but it is narrow and not deep. The ſouther entrey lyeth to the ſouthwards of all the ſhowlds by the ſouther poynt, in betwixt two ſhowldy ſand-banckes, whereof the one lieth off from the ſouthermoſt ſhowld, and the other from the ſouth point of the maine land, ſouthweſt and by weſt into ſea. The land to the northwards of this haven is altogether ſomewhat low ſandy land without trees, but to the ſouthwards of it there are all ſomewhat high ſand-hills without trees alſo, but comming before the havens mouth, you ſhall ſee within in the land many trees. When you come out of the ſea either from the northwards or the ſouthwards, neare about this havens mouth, you ſhall eaſily eſpy the foreſaid bankes on both ſides of the ſouther entrey, by the breaking of the ſea, and you may borrow of them by your lead, as neare as you pleaſe, they are very cleane and flat. Upon the ſandhils within the havens mouth, ſtand two great high
For to ſail into the haven of Arcaſon. maſts. If you will ſayle in there, then bring the two Maſts one in the other, and then they ſhall ſtand northeaſt and by eaſt from you, keepe them one in the other, and ſayle in ſo right with them, and you ſhall ſo ſayle in betwixt the two foreſayd bankes, and at low water you ſhall not finde leſſe then two fathom water, but at high water you ſhall have five and a halfe, and ſixe fathom water, go in ſo upon the markes, untill you come within the ſhowlds, and to the end of the ſhowld-ſand on the larboard ſide. Being gotten in within it, you muſt luffe up about by it, and goe then on north untill you come to the poynt, which you ſhall ſee on the ſtarboard ſide, but give that a birth, becauſe there runneth off a tayle, there is in that reach no leſſe then ten, eleven, or twelve fathom deep. Being come about that poynt; you may then ſayle in cloſe alongſt by the land on the ſtarboard ſide, which lyeth eaſtſoutheaſt, or you may anckor there in ſixteen, fifteen, twelve and ten fathom, or further in about the ſecond poynt, in two and three fathom. Over againſt the firſt point, on the north ſide, it falleth very far dry, a great waies within.

Bayone. From Arcaſon to Bayone, the coaſt lieth ſouth and north ſixteen or ſeventeene leagues. The Rivers mouth of Bayone lieth in betwixt two plaine ſtrands eaſtſoutheaſt, and eaſt and by ſouth, and ſometimes more eaſterly or northerly, by reaſon of the ſhifting and altering of the ſands before the Rivers mouth. Upon the land on the ſouth ſide of the channel, ſtand two maſts, theſe you muſt keepe one in the other, or the innermoſt a little to the northwards of the outermoſt, and run ſo in over the Barre or ſhowldieſt place, untill you come againſt the ſouth point, and then in alongſt by it. Upon the foreſaid Barre is at high water and Spring tyde, at leaſt three fathom, with an ordinary tyde two fathom and a halfe, but at low water no more then 3 foot water. When you come about the point, you muſt ſayle up to the ſouthwards, keeping about the middle of the channell alongſt the river, or rather neareſt the weſt ſide, for to avoid ſome foule ground and ſhowlds, that lie on the eaſt ſide, and anckor before the town in 4, 5, or 6 fathom. This Bar and this River is Pilots water.

A little within this Barre on the north ſide of the river lieth up to the northwards a great water within, of 7 leagues long, and falleth out into Sea by Cabritton. Alongſt that great water the ſhips were wont to ſayle up to Bayone, but it is now upon the ſouth end at the river of Bayone almoſt altogether paled too, ſo that there can but ſmall barkes goe through, for to keepe the better the Barre of Bayone deepe with ſcowring through of the water.

From the Barre of Bayone to S. Iohn de Luz, the courſe is ſouth and by weſt 4 leagues, there is a faire Bay where men may ride in five, ſixe, ſeven, or eight fathom, according as they will lye farre in, cleane ſandy ground, at the end of the Bay is a little tyde-haven, where upon lyeth the towne on the weſt ſide. At high water, and with an ordinary tyde, there cometh nine foote, but with a ſpring twelve foote water, at low water it falleth altogether dry, ſo that men may goe over there with drie feete. A litle within the weſt point of the Bay is alſo a little Dock, where there is a foot water more then in the foreſayd tyde-haven, but it falleth alſo dry at low water.

This Bay is very good to know by theſe marks that hereafter are written: It lyeth right in the Bight, to the eaſtwards of it lyeth the land north and by eaſt towards Bayone, and to the weſtwardes of it the land falleth away ſouthweſt and by weſt, and ſouthweſt towards Fonteravia. Upon the eaſt point of the Bay ſtandeth a white Fire-tower, which men may ſee farre off, eſpecially when the Sunne ſhineth upon it, then it ſhineth very white more then the other land. Upon the weſt poynt ſtandeth a flat white houſe a little wayes upon the high land, and to the weſtwards of the Bay it is upon the ſea ſide gray and blewiſh land. Alſo the high hill of S. John de Luz, is a good marke for to know this Bay, which remaineth in ſayling in, lye ſomewhat to the eaſtwardes, or on the larboard ſide. This foreſayd hill of S. John de Luz ſheweth it ſelfe out in height above all other hilles thereabouts, and thereby is very goed to be knowne: above upon the top it it ſomewhat flat, as is demonſtrated in the riſing of the lands. Upon this foreſayd hill ſtandeth a Chappell, from whence men may ſee into foure Kingdomes: France, Spaine, Navarre, and Arragon.

About two leagues ſouthweſt and ſouthweſt and by weſt from S. John de Luz, lye the rocks called the Pignons of S. Anna, not farre from land: a league to the weſtwards of them, lyeth the Bay of Fonteravia, being a faire Bay. Pignons of S. Anna

At the weſt poynt of the Bay lyeth the C. Figuer, a high poynt, upon it ſtandeth a caſtle, an to the ſouthwards of it a little chappell. At the poynt of this cape lyeth a rock a little wayes from it, but the ſea cannot run through betwixt them, except it be with very high floods, it breaketh a little through. At the eaſt ſide of this bay lye two high rocks, and thwart of them lye alſo ſome low rocks a good wayes off from the land. For to avoyd them you muſt ſayle in by the weſt poynt for to come into this Bay, and being within it, you may anckor in eight or nine fathom, but ſo that the foreſayd great rock at the C. Figuer ſtand north n.w. from you, there you lye in faire ſandy ground, and landlockt for a northweſt winde. The Kroonenbrough lyeth about halfe wayes betwixt S. John de Luz and this foreſaid Bay of Fonteravia. Kroonenbergh.

Paſſagie. A little league to the weſtwards of C. de Figuer, lyeth Paſſage alſo a faire haven. At the weſt ſide of the havens mouth, which is verry narrow, lyeth a round rock, ſo that it is evill to come in there with an ebb, but with a flood it is better, without it is very cleane, without any ſhowlds or fowle grounds but onely the foreſayd rounde rocke. The towne lyeth a little within the haven on the weſt ſide, where men doe lye before it in 7 fathom.

S. Sebaſtians. Two great leagues to the weſtwardes of Paſſage, lyeth S. Sebaſtians, betwixt both is alſo a ſand-bay in a bight, where there goeth up into the land a ſhowld little river, where come in many Barkes.

The haven of Saint Sebaſtians is good for to come into, men doe runne in there betwixt two little caſtles, whereof the eaſtermoſt is the great, ſtanding upon a high hill. The weſtermoſt is a little ſquare tower, and lyeth upon a little Iland, or rock. In the havens mouth being narrow, betwixt the two foreſayd little Caſtles, lyeth a rocke, which at low water is ſixe fathom deepe, and when it is a ſtorme out of the ſea, it breaketh allwayes upon it, and lyeth neereſt the eaſt-land, by the weſt-land it is deepe ten fathom. Now for to avoyd the foreſayd rocke in comming in, there commeth an Abbey to the eaſtwards of the weſtermoſt Iland, and a little Tower. If you keepe them one in the other, then you run into eaſtwards of it.

For to anckor without S. Sebaſtians in the road, you muſt keepe the high hill which lyeth upon the poynt of Cape Figuer, without the foreſayd eaſtermoſt caſtle, there you may anckor, but if the ſame come to be hidden behind the caſtle or Iland, then you may not anckor in the road of Saint Sebaſtians. When you are come through the narrow within the rock and the caſtles, then you may anckor at the eaſt ſide under the great caſtle, there is the beſt road. Within the foreſayd caſtle

caſtle goeth up a little water, men may goe at low water a foot from the eaſter caſtle alongſt a high ſtrand upon the maine land, unto the Towne, which lyeth behinde the foreſayd high hill with the Caſtle, yet the ſtrand at high water is covered; it is a bay, and within before the towne it is deepe five, ſixe, and ſeven fathom, at the weſt ſide under the little Iland, men may not anckor, becauſe it is flat and ſhowld there.

He that will goe forth from thence into S. Sebaſtians, let him run in, keeping the middle channell, betwixt the two Ilands, and let him leave the little Iland where upon the chappel ſtandeth on the ſtarboard ſide, running in ſo right againſt the firſt or the ſecond wall of the towne, and anckor there, the bots or ſhallops ſhall come aboard of him, and helpe him into the haven betwixt the walles.

A league to the weſtwards of S. Sebaſtians, lyeth a ſandbay, where men may anckor ſo deep and ſo ſhallow as they will.

Gateria. From S. Sebaſtians to C. de Martinchaco, the courſe is W. N. W. 13 leagues. Betwixt them both lye the roades Gateria and Deva.

Gateria lyeth from S. Sebaſtians weſt and by north, and W. N. W. diſtant 8 leagues, being a faire round ſand-bay, where is good riding for weſterly winds, men lye there within the weſt poynt right before the Towne, in faire ſandy ground, a north winde commeth right from the poynt. This bay is commonly called Kings-haven.

Alongſt the coaſt of Biſcay, betwixt S. John de Lua and Gateria is every where clean ground and good anckoring in 20 fathom.

From Gateria to Deva it is a league and a halfe to the weſtwards: which is an off-water that cometh out of the high-land.

Two leagues to the weſtwardes lyeth the poynt of Cape Martinchaco.

Barmea. About thirteene leagues weſtnorthweſt from S. Sebaſtians, lyeth the Cape de Martinchaco, a little to the weſtwardes of it is a good tyde-haven, where in lyeth a little Towne about a league within the land, upon a river which commeth out of the high land. A little to the weſtwards of Cape de Martinchaco, lyeth a great rock faſt to the land, and a little to the weſtwards of the ſame, another: upon the poynt called Punte de A villanes. Southweſt and by weſt from Martinchaco lyeth the haven of Barmea, a faire great Bay, the eaſter poynt is foule, therefore men muſt give it a good birth, and run in alongſt by the weſt ſide, when they are gotten in it is large enough, there they may anckor where they will.

Placentia. To the weſtwards of Barmea, lyeth alſo Placentia upon a little River, the towne lyeth a litle within the land. There are all tyde-haven.

From Cape de Martinchaco to Bilbao, (where betwixt lye the foreſayd havens of Barmea Placentia) it is ſouthſouthweſt and ſouthweſt and by ſouth 7 leagues.

Bilbao. From Placentia to Bilbao it is two leagues weſtſouthweſt and weſt and by ſouth. Bilbao lyeth upon a great river, alongſt which there commeth of much Iron, it is a good haven, but it lyeth not farre in, by reaſon of the Barre which lyeth thwart over the haven, where men muſt goe in with high water.

At the eaſt poynt of Bilbao ſhooteth of a riffe, which men muſt avoyd, there lye alſo ſome rockes under water. It is a high ſteepe poynt, and is white to ſee to.

Within the riffe that runneth off from the poynt, men may anckor in ſeven and eight fathom, betwixt the poynt and the Piere on the eaſt ſide, there the Pilotes come off which bring up the ſhippes; and there men may lye land-lockt for a northweſt winde. From this foreſayd poynt or road to the Barre or river mouth of Bilbao, it is a league and a halfe ſouth and by weſt, which lyeth in by the weſt land, there ſtand five or ſixe houſes upon the weſt land, when the two weſtermoſt houſes come one in the other, or when you may ſee through the two eaſtermoſt houſes, which ſtand within in the land, then are you upon the Bar or ſhowld, then goe in ſouth, and ſouth and by eaſt right with the Caſtle Portugaletto, and alongſt cloſe by the Caſtle, and anckor a little within the Caſtle for a weſt winde. But when you are before the Barre, the Pilotes come off and bring you to the Town.

When you lye without in the Bay, then you may ſee Mount Anthony lie weſt and by north from you.

Caſtro. From the poynt of Bilboa to Caſtro, the courſe is weſt five leagues, that is a good haven for ſixe, ſeven, and eight fathom depth. The narrow of the haven lieth in ſouth, in 10 fathom. But further in the river towards the towne, it is not deeper then 3 or 4 fathom.

S. Anthony. From Bilbao to the hill of S. Anthonies, it is weſt and by north nine or ten leagues. From Caſtro to Laredo, the courſe is weſt diſtant five leagues, upon the weſt ſide lyeth the foreſaid hill of S. Anthonies, which is a high hill, men may ſayle in cloſe alongſt by it, untill they come about the eaſt poynt; within it is wide and broad, and a fit haven for great ſhippes, there men may anckor in ſeven or eight fathom. To the eaſtwards over againſt the hill of S. Anthonies, in the middeſt of the ſound, lyeth a rane of rockes under water, where men may ſayle in about it on both ſides, men may eaſily eſpy them, becauſe it doth alwaies breake upon them, within them is the road for ordinary ſhips, a little before the haven, which is built with a wall: but the great ſhippes lye a little further off in 6 or 7 fathom depth. On the ſouth ſide of the haven is a little tyde-haven, from the ſame there commeth a great riffe ſhooting off from the eaſt ſide, towards the hill of S. Anthonies; within it is two fathom water right before the village, from the village commeth a tayle of ſand, lying thwart out, within it at low water it is a fathom deepe. In the middeſt of the ſound it is nine fathom, and at the poynt of Saint Anthonies 20 fathom deep. Suncken rocks.

From S. Anthonies hill to Cape de Keſgo it is weſt and W. and by ſouth two leagues, that is a great Cape lying to the eaſtwards of S. Andero: thwart of it is clean ground. C. Keſgo

From Cape de Keſgo to the weſt poynt of S. Andero, it is weſt and by ſouth five leagues, a little to the ſouthwards of the poynt of S. Andero, upon the eaſt poynt of Sardinis, is a ſandbay, there is good anckoring in ten fathom. S. Andero

From C. de Keſgo to the haven of S. Andero, the courſe is W.S.W. diſtant 2 great leagues. S. Andero lyeth within a Bay, there lyeth an Iland before the haven, men may goe about it on both ſides, it is deepe 8 and 9 fathom; but to the ſouthward of the Iland it is deep, 5, 6, and 7 fathom, according as men will come neare to the ſtrand, the haven lyeth in firſt W. N. weſt. The Iland lieth a great league within the bay: from the eaſt point of the haven, unto the weſt point of the land, it is ſouth and north about a great league. S. Anthonies and the weſt point of S. Andero, lie one from the other eaſt and weſt, about 5 leagues.

For to know the land when you fall with the land about Laredo, you muſt know that on the weſt ſide of the haven of Laredo, lyeth the hill of Saint Anthonies, which is a very high hill, which men may ſee very farre from the eaſt and the weſt, and a little above the towne of Laredo, men may ſee alſo a ſharpe hill like the poynt of Diamont; or the poynt of a two hand ſword, further it is about Laredo very high double land, two, three, and at ſome places foure double. The hill of S. Anthonies doth ariſe in two high hommockes, with a valley or ſaddle in the middeſt betwixt them both; within in the land lye alſo two high hills with ſharpe toppes. Above and to the wwards of S. Anthonies, lyeth a piece of land about two leagues long by judgement, which lyeth in five hills, the eaſtermoſt is the loweſt, and riſe all higher & higher towards the weſt, ſo that at the laſt to the weſtermoſt is the higheſt, which goeth off ſomewhat flat downwards towards the weſt. Betwixt that eaſtermoſt hil & S. Anthonies, lyeth a bay about a league long, called the Bay of Port, men cannot ſee theſe foreſayd hills when they are cloſe by the land, but they muſt be a good wayes off to ſeawards. To the weſtwards of theſe foreſayd hills lyeth an other peece of land, which at the eaſt end is higheſt, and goeth ſloping off towardes the weſt end, allmoſt like Portland. Betwixt that poynt and the five foreſayd hills, lyeth an other ſand-bay, where abouts ſtand ſome litle houſes, but by it lye many rockes and fowle ground. Thereabouts within the land lyeth the foreſayd high round ſharpe hill in forme like the poynt of a ſword. Laredo. Bay of Port.

S. Andero hath but few hills that are good to bee know, but when men are before the haven, then they ſhall ſee to the eaſtwards of the towne, a Caſtir upon a high hill, in forme like a Sugerloafe, or a bey-crock, and to the eaſtwards of it is much double land of two and three height double. But when men come about the Cape de Keſgo, then they ſhall ſee preſently the caſtle upon the weſt land.

From S. Andero to Cape de Pinas, the courſe is weſt or a little more northerly 38 or 39 leagues. Betwixt them both lye theſe havens following.

Firſt the haven of S. Martin, or Settevilles, a tyde-haven lying eaſt and weſt 4 leagues from S. Andero. S. Martin Settevils.

From thence to S. Vincent alſo a tyde-haven is five leagues diſtant: the haven goeth in on the eaſt ſide; from the weſt ſide commeth ſhooting off a little river, and in the midſt of the havens mouth lyeth a little Iland, where men may goe in on both ſides. S. Vincens

From S. Vincent to Lhanes, a tyde-haven, the courſe is W. 2 or 3 leagues. Upon the weſt ſide of the haven ſtandeth a little Church: and a little within the haven, lyeth a middle Lhanes.

plate or ſand, men muſt go in on the weſt ſide of the ſand: theſe are all narrow havens, and but little knowne.

From Lhanes to Rio de Sella, the courſe is weſt 5 or 6 leagues: betwixt them both lye alongſt the coaſt many rocks, and within them many ſand-bayes, where men for need might ſave ſhips.

Rio de Sella. Hee that will goe into Rio de Sella muſt looke out for a maſt which ſtands upon the eaſt land cloſe by, the ſame men muſt goe in, the weſt ſide is within foule, within the maſt men muſt anckor before the villagie, this is alſo a tyde-haven.

From Rio de Sella to Villa Vitioſa it is weſt, 9 leagues, this is alſo a tyde-haven, but is clean, the havens mouth lyeth in S. S. E. and ſoutheaſt and by ſouth cloſe alongſt by the weſt poynt of the land, the eaſt ſide is fowle unto the middeſt of the haven: there lyeth a rock with a plate right in the midſt of the haven, which a low water falleth dry: ſo ſoon as men are within that rock, they muſt anckor within the rock; upon the weſt ſide lyeth the towne, men may alſo ſayle up to it, and anckor there in the ſhowld water.

Sanſon. Seven leagues to the weſtwards of Villa Vitioſa lyeth the out-poynt of Sanſon, to the eaſtwards of it lyeth a little Iland, where upon ſtandeth a little Tower. Betwixt Sanſon and the foreſayd little Iland is a good road in ſix or ſeven fathom.

At the weſt ſide of Sanſon is alſo a good road right before the little haven of Sanſon in 6 or 7 fathom.

Gion. To the weſtwardes of Sanſon lyeth Gion with a Piere or Head that is paled off, under the which the Fiſhermen which dwel there, lay theyr barkes.

Tores A great league to the weſtwards of Gion lyeth the Bay of Tores, a good road for a ſouthweſt and weſt wind in 8 and 9 fathom. Upon the poynt ſtandeth a high tower.

C. de Pinas. Three leagues to the weſtwards of Tores lyeth Cape de Pinas, where many rockes lye off to ſeawards, a leaſt a halfe league of, ſome doe ſay that men may ſayle through betwixt the poynt and theſe rockes.

From the cape de Pinas lyeth off a rane of rockes, lying at the leaſt a halfe league into ſea, ſome ſay that men may ſayle through betwixt the poynt and theſe rocks. But a little within or to the weſtwards off the Cape de Pinas, lyeth a great rock, betwixt that rocke and the land men may ſayle through.

When men are within the Cape de Pinas, then lyeth Avilles three leagues from thence ſouthſouthweſt which is a good tyde-haven, where a great ſhippe may goe in at halfe flood, alſo there is a good road before this haven in 6 and 7 fathom.

Avillis. For to ſayle in there, men muſt goe in by the eaſt land, the weſt-land is farre off ſhowld, there ſtandeth a little Chappell upon the eaſt-land, men muſt ſayle in cloſe by it, and anckor a little wayes within two rockes that lye on the eaſt ſide, a litle within the havens mouth. The towne lyeth a league further up. From the weſt poynt runneth off a riffe, and lyeth inwards alongſt the haven, towards the town, ſo that it is there very ſhowld on both ſides. On the weſt ſide without the haven in the bight, lye two great rockes right before the little Church in the Sand-bay, men ſayle round about them, but it is not very cleane: but without the rocks is good anckor ground in 7 or 8 fathom, over againſt the little Church that ſtandeth againſt the high land.

Luarca. From Avilles to Luarca is 6 leagues and from Luarca to Ribadeus W. S. W. 6 leagues, and from Avilles to Ribadeus S. W. and by weſt 12 leagues.

Ribadeus. From the eaſt poynt of the havens mouth of Ribadeus, lyeth off a ledge or riffe off rocks towards the weſt ſhoare, you may ſound in about it in foure fathom, or foure fathom and a halfe: or elſe if you keepe the little towne Caſtropoll even without the poynt, and ſo ſayle right in with it, then you ſhall not come to neere the foreſayd ledge, but you ſhall ſayl far enough alongſt to the w. wards off it. The weſt poynt ſheweth it ſelfe when you come in out of the ſea, like an Iland; upon it at the north end ſtandeth a flat tower, allmoſt like the tower in the Groyne, but not ſo great. About thwart off that Tower lyeth a ſuncken rocke a little wayes from the land, you muſt look out for it, and take heed off it, when there commeth in any great ſea, you can eaſily eſpye it by the breaking of the ſea upon it, but not with ſmooth water: at the very loweſt water it commeth even with the water. The weſt ſhoare is fowle and rocky: there runneth off to the ſouthwards of the foreſayd Tower alſo a fowle ledge or riffe off rocks, at leaſt halfe wayes over the havens mouth, and at the ſide of it you cannot uſe the lead. When you are paſt the ledge or riffe that lyeth off from the eaſt ſhoare, you muſt run in about it, and edge in ſomewhat to the eaſt ſhoare, and ſayle in alongſt by it, untill that you are paſt, or come to the end of the foreſayd ledge or riffe off rockes, which lyeth off from the weſt ſhore, as ſoone as you ſhall bee paſt it, you muſt luffe up about it towards the weſt ſhoare, for to give the eaſt ſhoare (within the havens mouth) a birth, which is a great wayes within very flat or ſhowld, but on the weſt ſide it is deep water. There ſtandeth a little Tower on the weſt ſhore a little within the poynt, where the riffe lyeth off, which you ſhall ſee when you are come within the weſt poynt, and run alongſt by the riffe, when you get that little tower weſt or thwart of you, then are you at the end of the riffe, then you muſt ſayle towards that little Tower, untill that you come to the weſt ſhoare, and run in alongſt by it, untill you come before the Towne, there you muſt lye with an anckor to ſeawards, and with a cable faſt on the rockes.

Of the Tydes and Courſes of the ſtreames.

Like as on al the coaſtes of France, ſo alſo at the mouth of the river of Burdeaux, maketh high water a ſouthweſt and northeaſt moone.

On all the places, and before all the havens off theſe coaſt, a ſouthweſt and northeaſt moon maketh the higheſt water; but within the havens about a poynt later, according as they lye deepe within the land, like as on the coaſts off Brittaigne, Poictou, and Gaſcoigny. Men reckon here alſo no falling or ſetting of the ſtreames. But the ſtreames fall here thwart off and on.

Of the Depths.

The land againſt the River of Burdeaux men may ſee from the poop in 30 fathom, and the Tower off Cordan in 27 fathom.

Betwixt Arcaſon, and S. Iohn de Luz, men may ſee the land in 30 fathom, when men are about Bayone, they ſhall ſee Cabritton, Bayone, Bedert, and S. Iohn de Luz, almoſt all flat Towers.

Being before Paſſage, men may ſee alſo the poynt C. Figuer, and S. Sebaſtians, the land lyeth in there with a great Bay.

About C. de Figuer lyeth a high hill, which at the ſouthweſt end is very ſteepe, and goeth very long ſloping down towards the north.

When men are before S. Sebaſtians 7 or 8 leagues without the land, then it riſeth ſomewhat long, and at the weſt end ſteep and hollow, but when men come cloſe by the land, then it is very high and ſteepe.

When men are 8 leagues without S. Sebaſtians, then may they ſee the eaſtermoſt or greateſt caſtle upon the high hill, and alſo the little Iland to the weſtwards of it.

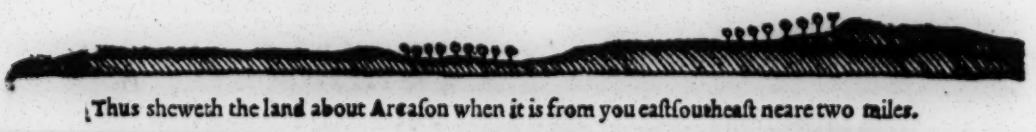
Courſes and diſtances.

From Cordan to Arcaſon ſouth	20 leagues
From Arcaſon to Bayone ſouth	16 or 17 leagues
From the Tower Cordan to Cape de Pinas weſtſouthweſt ſomewhat ſoutherly 75 leagues	
From Arcaſon to Bayone ſouth	16 or 17 leagues
From Bayone to S. Iohn de Luz ſouth and by weſt	4 leagues
From S. Iohn de Luz to the Pignons of S. Anna, ſouthweſt and by weſt	2 leag.
From S. Iohn de Luz to S. Sebaſtians weſt	8 leagues
From S. Sebaſtians to Gateria weſt and by north, and weſtnorthweſt	8 leagues
From Gateria to Cape Martinchaco northweſt	5 or 6 leagues
From Bayone to the Seames northweſt	112 leagues
From S. Sebaſtians to Bell-Ile northnorthweſt ſomewhat northerly,	80 leagues
From S. Sebaſtians to the Seames northweſt and by north	112 leagues
The courſes and diſtances of the places one from the other, is declared in the deſcription.	
From Cape Martinchaco to Arcaſon northeaſt eaſterly,	28 leagues
From C. Marthinchaco to Vſe, north eaſterly	60 leagues
From S. Andero to the Seames northnorthweſt	96 leagues
From Cape de Pinas to the Tower of Cordan eaſtnortheaſt and northeaſt and by eaſt	72 leagues
From Cape de Pinas to Porthus or S. Martins Iland, the courſe is northeaſt eaſterly	80 leagues
From Cape de Pinas to Bell-Ile, the courſe is northnortheaſt	80 leagues
From Cape de Pinas to the Seames north	88 leagues
From Cape Pinas to Cabo de Veilli in Ireland north and by weſt weſterly 170 leagues	

Heights.

The Tower of Cordan lyeth in	45 degrees, 45 minutes
Arcaſon in	44 degrees, 40 minutes
Bayone lyeth in	43 degrees, 45 minutes
The Cape de Martinchaco in	43 degrees, 46 minutes
The Cape Martinchaco lyeth in	43 degrees, 46 or 48 minutes
The C. de Pinas lyeth in	43 degrees, 54 or 56 minutes
The whole coaſt off Biskaye betwixt Cape de Pinas and Martinchaco, lyeth in about	43 degrees and 43, 44, or 45 minutes

How theſe Lands doe ſhew themſelves at Sea.



Thus ſheweth the land about Arcaſon when it is from you eaſtſoutheaſt neare two miles.



Thus appeareth Arcaſon when it is northeaſt and by eaſt about two miles.

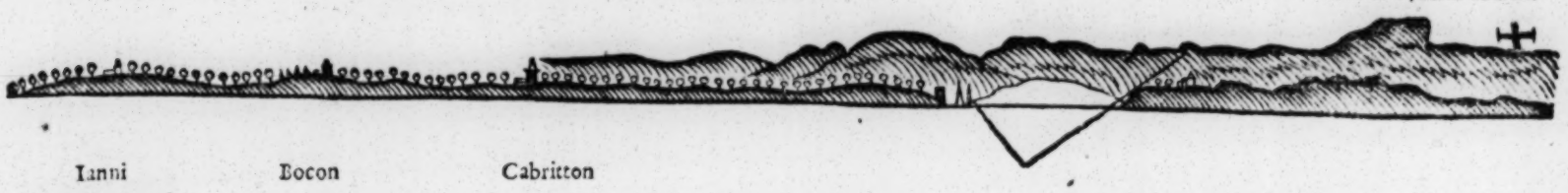
Thus



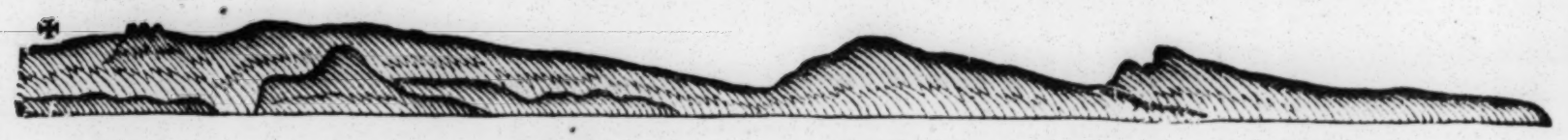
Cabritton Bayone S. Iohn de Luz Fonteravia Paſſage S. Sebaſtians.

Thus sheweth the land about the bight of S. Iohn de Luz, of from Cabritton untill paſt S. Sebaſtians.

White downe Hill of S, Iohn de Luz.



Ianni Kroonenbergh Bocon Cabritton



Fonteravia C. Figuer

The foreſayd Iland about the bight of S. Iohn de Luz from the northwards of Cabritton untill paſt Fonteravia, sheweth thus, as is demonſtrated in theſe two figures, when you are before the barre of Bayone.

Hill of S. Iohn de Luz, ſouth 5 leagues.



Kroonenbergh Fonteravia



C, Figuer S. Sebaſtians.



When the Hill of S. Iohn de Luz is ſouth from you five leagues, then the land to the eaſtwards of it untill paſt S. Sebaſtiaens, sheweth as is here above portrayed in theſe two figures, the EB, and CC, belong one to the other.



Thus sheweth S. Sebaſtiaens, when you get firſt ſight of it, being ſeven leagues of from it.



S. Sebaſtians.

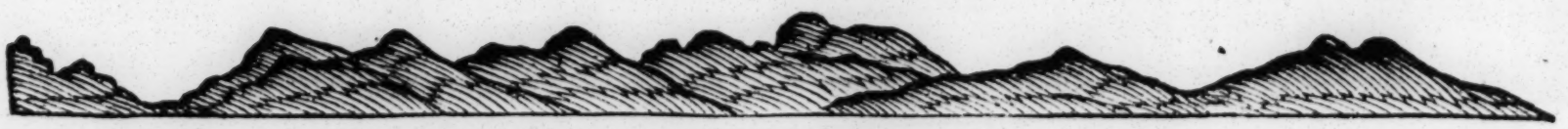
Thus sheweth the land about S. Sebaſtians when it is five leagues from you.



C. Figuer Paſſage S. Sebaſtians

Paſſage and S. Sebaſtiaens, being ſouthſouthweſt from you, sheweth thus.

C. Martinchaco. Keyſers land



Thus sheweth the C. Martinchaco and the land to the eaſtwards of it.

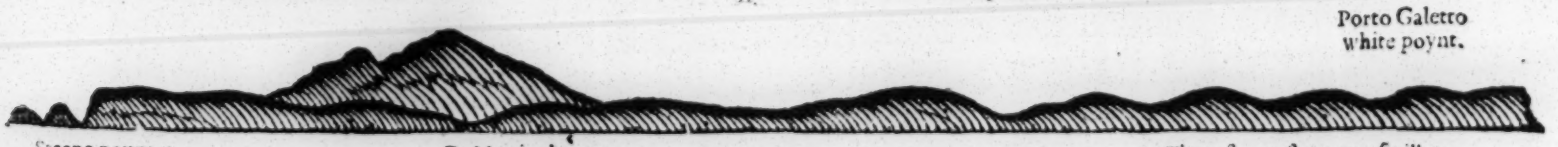


Thus sheweth the land to the eaſtwards of Bilbao, when men fall there with the land.



To the weſtwards of Bilbao towards Caſtro, men shall a high sharpe hill and sheweth thus towards Caſtro.

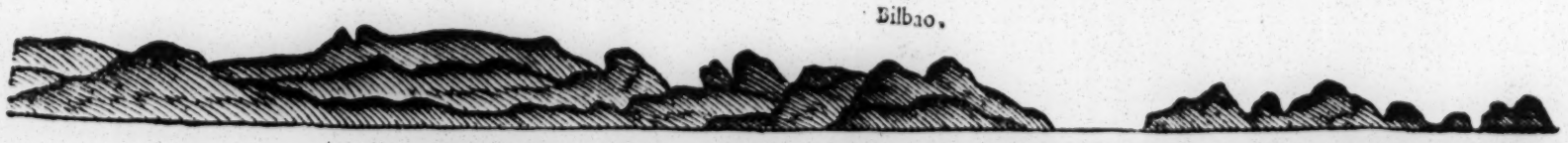
Porto Galetto white poynt.



Steepe poynt C. Martinchaco The eaſtermoſt poynt of Bilboa.

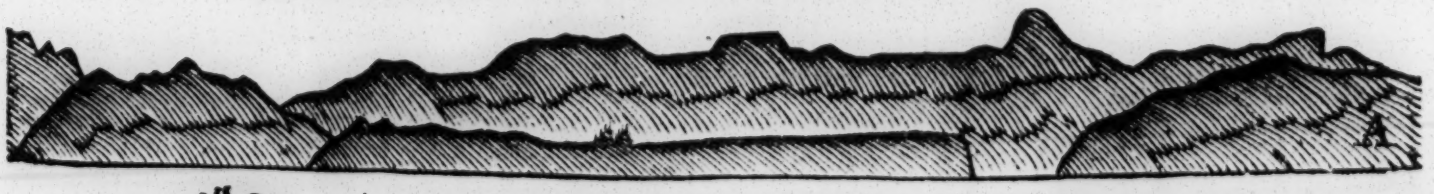
Thus sheweth the land betwixt the Cape Martinchaco and Bilbao,

Bilbao.



Porto Galetto S. Antonio C. Keſgo.

Thus sheweth Bilbao and the land to the weſtwards of it, when you are thwart of it.



Outrock, like if there ſtand two men upon Bilbao

When the sharpe hill over againſt the haven of Bilbao is ſouth and by weſt from you, then the land sheweth, as in this and the following figure may be ſeene the AA belong one to the other.

Caſter



Caſter



Lareden,



Thus sheweth the hill of S. Antonio lying at the weſt ſide of Larea.

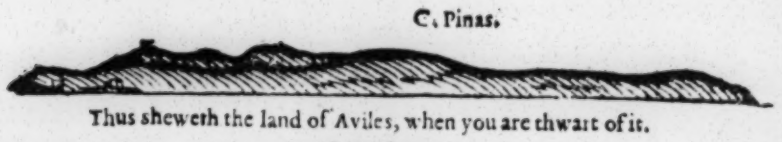


The hill of S. Antonio sheweth thus, when it lyeth S.S.E. from you,



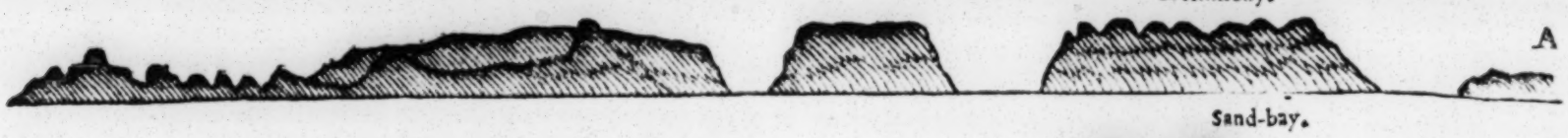
The land to the eaſtwards of Laredo, being ſouth from you, sheweth thus with a sharpe hill.

C. Pinas.



Thus sheweth the land of Aviles, when you are thwart of it.

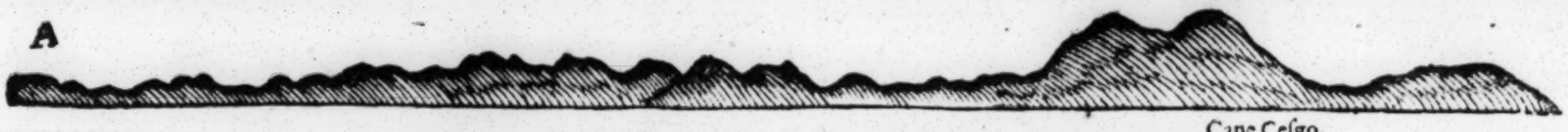
S. Anthony.



A

Sand-bay.

A



Cape Ceſgo.

The land betwixt the weſtpoynt of Bilbao, and C. Keſgo to the weſtwards of Mount S. Anthonio sheweth at ſea when you ſayle alongſt by it, as is portrayed in theſe two figures here above.



Thus sheweth the land of Biskaye betwixt Laredo and Rio de Sella, when you ſayle alongſt by it,



Thus sheweth the Land from Rio de Sella of, to Cabo de Pinas, when you ſayle alongſt by it.

Theſe foure figures following belong one to the other, the like letters, as AA. BB, CC, one to the other, and is the coaſt from the eaſtwards of C. Vincent to C. de Pinas

S. Vincent. Rio Sella.



A

Thus sheweth the land to the eaſtwards of S. Vincent untill paſt Rio de Sella, when the hill with the three hils is foure leagues thwart from you, and Rio de Sella is foure leagues ſouthweſt from you.



A

B

Cape Ceſgo Villa Vitioſa. Sand-Bay Sand-bay.

Thus sheweth C. Keſgo, Villa Vitioſa, and the land to the weſtwards of them, when C. Ceſgo is weſt foure leagues, and Villa Vitioſa foure or five leagues ſouthſouthweſt from you.

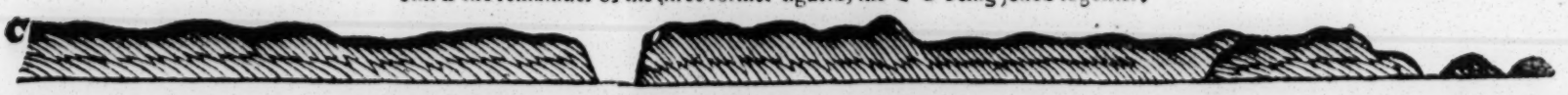
Sanſoen.



C

Sand-bay. Thus sheweth the land of Biskaye, when you are thwart of Gion.

This is the remainder of the three former figures, the C C being joned together.



C

Channel of Tores. Thus sheweth the land when you are by Tores.

The three figures following one to the other, the like litters one to the other, and shew the riſing of the land on both ſides of the Cape de Pinas, to wit, when the Cape Pinas is about foure leagues ſouth, ſomewhat weſterly, and the great hill to the eaſtwards of it is ſoutheaſt from you.

Southeaſt.



This hill lyeth moſt commonly covered with ſnow.



A

B

B

Theſe three figures following belong one to the other, at the like letters one to the other, and shew the riſing of the land betwixt C. de Pinas and Ribadeux, when you ſayle alongſt cloſe by the land.



Z

A

Thus is the eaſtermoſt towards C. de Pinas, when the land againſt Z is ſouth from you.

Thus

De Custe van Galissen tusschen de Reviere van Ribadeus en Capo de Finisterre.

De Custe van Portugal tusschen C. Finisterre en de Reviere van Port a Port.

Noortze Sagners alias Les Villes

C. del Brito

Viveros

I.S. Cipriano

Mayor

Pitanue

Ferol

C. de Prior

Sinorus

Cabo de Ortegal

Ponte Vedra

Aldana

Vigo

Cannas

Boos

Bajona

Rio Roxo

Porto nova

Bly Lones

Villa nova

Dorf

Morea

C. Finisterre

Deutsche mylen 15 in een graadt

Spaansche mylen 17½ in een graadt

Eng. en Fransf mylen 20 in een graadt

Duytsche mylen 15 in een graadt — Lieues d'Allemaigne 15 en un degre

Spaensche mylen 17½ in een graadt — Lieues d'Espaigne 17½ en un degre

Eng. en Frans mylen 20 in een graadt. — Lieues Angl. et Franc.o en un degre

C. Finisterre

Quires

C. de Bastia

C. Corrianne

I. Essuriga

Les Costes de Galissien et Portugal entre la Reviere de Ribadeus et la Reviere de Port à Port

Port à Port

Viana

Barca

Ville del

Coude

Camina

S. Nicolaes

S. Jans

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Thus sheweth that land against Z, being south from you not farre off.



Ribadeus. Thus sheweth the land betwixt Luarca and Ribadeus.
These two figures following belong one to the other at the AA together.



Thus sheweth Ribadeus, when you are thwart of it about a halfe league from the shore.



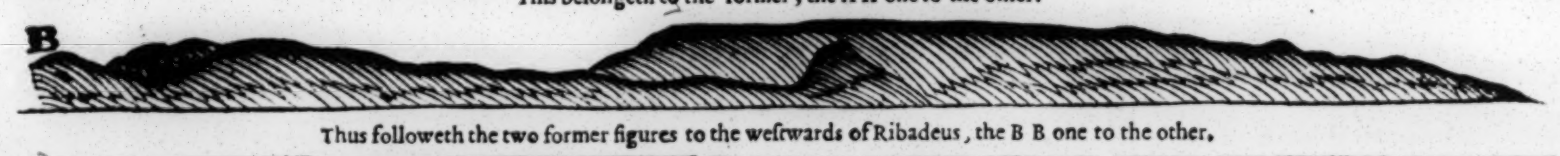
Thus sheweth the land to the westwards of Ribadeus, when the hill by S, is south from you, and followeth to the former figure.
These three figures following belong one to the other, the AA and BB one to the other, and shew the rising of the land about Ribadeus, and to the westward of it.



Thus sheweth Ribadeus, when the hill to the westwards of it, marked here with P, is south and by east from you, 4 leagues.



This belongeth to the former, the A A one to the other.



Thus followeth the two former figures to the westwards of Ribadeus, the B B one to the other.

The third Demonstration,

Which Decliniateth the Sea-coastes of Galissia and Portugale, betweene Ribadeus and the River of Port a Port.

A Little league to the westwards of Ribadeus lyeth a tyde-haven, he that cometh from the west alongst by the shore thwart of it, should lightly thinke that to bee the haven of Ribadeus, but it is light to discerne from it by these markes following. On both sides of this tyde-haven are the coasts all high land, but on both sides of the havens mouth of Ribadeus, it is low land. Also there lyeth a high sharpe hill, and very good to be knowne, which ariseth out above all other hills thereabouts, which may bee knowne at least 7 or 8 leagues off, upon it lye some hee apes of stones toe see to like little house, when that you have that hill s. s. w. from you, and sayle in so right with it, then you shall with the land right before the havens mouth off Ribadeus.

Viverus. Northwest from Ribadeus about 8 leagues, lyeth the Cabo de Brilo, a little to the westwards of it lyeth the little towne Viverus. To the westwardes off the Bay off Cipriaen (where men may anckor in ten fathom) lye two great high rockes: w. n. w. from these rockes about a halfe league lyeth the land S. Ciprian, right before the haven of Viverus, whereby this haven is good to be know: you may sayle about on both sides off this Iland into the haven off Viverus, in all alongst in the middle of the channell south and south and by west untill you come before the town, being within, you may ankor where you will either on the east or west side, it is there should water of 5, 6, 7, and eight fathom, according as you run farre in. From the havens of Viverus or from the Iland S. Ciprian to C. de Ortegall, the course is w. n. w. nine leagues.

Betwixt both, a league to the westwards of Viverus, lyeth the little towne of S. Marcus with a Bay, there men may anckor in 7 or 8 fathom, and ride for a s. s. w. and west wind.

Two great leagues to the westwardes of S. Marcus lyeth the river of Caryns, there is also good anckoring, and from thence forth unto the Castle of Ortegall, all the coast alongst, it is there every where cleane. From Caryns to Ortegall, the course is northwest, five leagues. Ortegall is a great poynt lying out, to the eastwards of it, men may lye landlockt for a northwest, west, southwest, and south winde, thwart of the castle is the best road, there men may anckor in 8 or 9 fathom: When men come from the east. Ortegall is good to bee knowne, they shall see the castle stand against the high land.

C. Ortegall. About a league northnorthwest into sea from the C. de Ortegall, lyeth a great rane off rocks: betwixt them and the foresayd Cape, men may sayle through in ten fathom.

From the Cape Ortegall to the C. Prior, the course is southwest ten leagues: betwixt them both lyeth a Towne called Sedaira, by the Dutch Shippers called Siverus, which hat a deepe haven lying in southeast. The north side off the haven is rocky and fowle, which you must avoyd, and run close in by the westland, which is a high land; alongst by it is twelve fathom deepe, within the havens mouth it is ten fathom deepe, you may sayle in untill you come before the towne, and anckor there in 6 or 7 fathom. S. verus.

C. Prior. Five leagues to the westwardes of Sedeira lyeth the C. de Prior, which is a very ragged hill, to see to a far off, as if it were full of people.

Three leagues from the Cape de Prior, lyeth the haven of Feroll: betwixt them both lye two little sand-bayes, the southermost (where in stand some little white houses) is the greatest, and lyeth a little to the northwardes of the north poynt off Ferroll, when you come neere the Baye, the haven beginneth to open it selfe, it lyeth eastnortheast and east and by north in, amids the channell betwixt two high lands: when you come in, you must presently edge up to the northwardes by the north poynt and anker there a little to the westwardes of the village Ferol, before the village it is flat and rocky ground.

For to saile into Feroll from the southward. When you come from the west, or from the Groyne, and will sayle into the haven of Feroll, then goe away from the little Iland S. Blasius north and north and by west, and run a good wayes about, without the south poynt of Feroll (which is very fowle and rocky, untill that you see the haven open, goe then yet so farre to the northwards of the south poynt, untill that the haven doe shut againe, and run then right in with the foresayd greateste sand-bay, wherein stand the two or three little white houses to the northwards off the haven, untill that you bee within the south poynt, and the fowle grounds which lye off from it, sayle then right to the north poynt of the haven, and alongst by it towards the south-side, untill that haven doe open it selfe againe, and

runne then (as before) alongst in the middest of the channell. This haven is so narrow in the comming in, that you may cast a stone upon the land on both sides, and in that narrow it is 20 fathom deepe. When you are in the havens mouth, you may see through betwixt the Iland Sisarga, and the maine land to southwards of it.

For to sayle into the Groyne.

To sayle from Feroll to the Groyne, the course is south, and south and by west 3 leagues, when you come neere the west-land, you must give it a birth, at least of foure or five Cables lengths, because it is not very cleane. When you come by the poynt where the Castle standeth upon you shall see then also a little Iland with a little house upon it, you may sayle alongst by it within a halfe cables length, and runne about by it, up to the westwardes, untill you come before the Fisher village, and anckor there in sixe, seven, or eight fathom.

From Cape de Prior to the Groyne, the course is south, and south and by west five leagues.

Eastnortheast from the foresayd Hand where the Castle standeth upon, goeth in a Sound southeast, five or sixe leagues within the land, to Bitanze, where you may anckor on the west side under a row of rocks, in 10 or 12 fathom, also you may sayle so deepe in, that you can see no sea.

Haven of Bitanze.

To the northwards of that Sound, over against the poynt of the Groyne, lyeth also another haven or Sound, called Ponte de Mas, on the north side lieth a row of rockes, where men run alongst to the southwardes of them: men may also sayle there so deepe in, that they can se no sea. A good wayes within lyeth a great bridge over the river.

ponte de Mas.

He that commeth from the west off from the Iland Cisarga and is bound into the Groyne must give the north point or the west poynt of the Groyne (where the tower standeth) a birth of 4 or 5 cables lengths, as before is sayd, which point is rocky and fowle farre from the shore, & run then eastsoutheast, and southeast about by the poynt, and afterwardes s. s. e. unto the little Iland with the Castle and about by it as is before sayd.

Iland Cisarga.

The little Iland Cisarga, of the Dutchmen called Cesarie, is fowle round about, and lyeth from the poynt of the Groyne, due east and west distant 7 or 8 leagues, from the haven of Feroll west and by south, from the C. Prior w. s. west and southwest and by west, and from the C. de Ortegall southwest, and southwest and by west 17 or 18 leagues.

queres.

From the Iland Cisarga south and by west, and s. s. west lyeth Queres, a good haven also for great ships, the west shore is cleane, but the east shore is fowle, therefore men must sayle in alongst by the west shore, when they are betwixt the two lands, then they must goe in amids the channell, unto the poynt, and then run up the westwardes a great halfe league in, and anckor there in 7, 8, and nine fathom.

C. de Bylem.

From the Iland Cisarga southwest and by west, and w. s. west 12 or 13 leagues lyeth the east point of Monsie, called Cabo de Bylem, which is a high steepe poynt, with many ragged rocks lying of loose from the land, whereof the greatest, being like a tower, doth shew it selfe black, and is called the Munck.

There lyeth also a great rane of rockes right before the haven or sound of Monsie, southwest and by south from the Munck, at least two or three cables lengths long but the innermost end of it lyeth from the Monck south and by west. When men fal with the land of Monsie, it is all double land, about the Cape de Finisterre lyeth a high white sand, lying in within the land a sand-bay.

Also men may see comming about the C. de Finisterre, a ragged hill which runneth alongst so farre to the southwards that men may see it before the Moores.

Monstey.

He that is bound in for Monsie, comming from Cisarga, must goe in close alongst by the C. de Bylem, or Bellem: this poynt is altogether a ragged high sharpe land of steep rocks, as before is sayd, and when you are by that poynt, then you must keep the Cape de Coriane a shipps length without the C. de Kote, so long untill that the Church of S. Maria come without the poynt of Monsie; run then in at the easter channell s. s. e. upon these markes, untill you be past the Church, then you shall see a row of rockes, run in behinde or within them, and anckor there before the village of Monsie in 5, 6, or 7 fathom. When you sayle thus from the cape de Bylem to Monsie, then the rocks (which lye in the middest before the Haven) remaine about an English mile to seawards on the west side of you.

The wester chahnel off Monseye.

For to sayle in at the wester channell, you must go in e. s. e. in different neare alongst by the land, and when the foresayd Ladies Church commeth without the poynt, then you must sayle towards the Rockes, which lye before Monsie, as is beforesayd, and anckor within the rockes in 7 or 8 fathom, but runne not to farre in, because there shooteth off a showld riffe alongst the Haven, whereoff you must take heed.

The easter channell is beter to come into, then the wester channel, sayle not into Monsie before that you see the foresaid Church without the poynt, you may also anckor on the north side off the Haven in five, six, or seven fathom.

The easte channel off Monsye.

To the southwards of the village of Monsie is a bay where the foresayd riffe or showld lyeth before, lying e. n. e. at least cables lengths alongst the Haven.

Our Ladies Church and the Munck lye one from the other and by e. and s. and by w.

C. de Coriane.

Southwest from the cape Bellem 3 leagues lieth the C. de Coriane.

From cape de Coriane it is south and north three leagues to Cape de Finisterre: betwixt the two capes is a Sand-bay where men may anckor to the eastwards of a great rock in six or seven fathom. This is a great Bay which goeth in far into the land. At the n. side of this Bay lye rocks under water, whereof men must take heed.

Seche. Corck. Bayone.

About a league to the eastwards of cape de Finisterre on the south side, lyeth the Haven of Seche or Corcovia, and is called by the Dutch Schippe-masters, Corck Bayone. Betwixt this Haven and the cape lye two sand-bayes, the first, or that which is next unto the cape, is the greateste, and by the second goeth in this Haven north, in eight and nine fathom. On the east side of the Haven lyeth a great Rocke, and about southsouthwest of from that Rock, almost in the middest of the Haven, lyeth a suncken rocke under water: but run in n. untill you espye the towne on the west side, and anckor there in 6 or 7 fathom. Within upon the River lieth also a Village, or little Towne, about northnortheast from you.

Moores.

From Cape de Finisterre to the Haven off Moores, the course is southeast 5 great leagues, when you come about the Cape de Finisterre, you shall see a high ragged hill which runneth so farre to the southwards, that you may see it also before Moores, that is good mark for to know the laed by thereabouts

When the foresayd ragged Hill is Northeast from you, then are you thwart of Cape de Finisterre, and then the hill Monte Lauro, which lyeth upon the northeast poynt off Moores, lyeth e. n. east from you, that is a high cloven hill which is also good to know.

Southeast three little leagues from the Cape de Finisterre, lyeth a rane of rockes under water, and eastsoutheast about two leagues from these rockes, lye also some rockes above water, a little to the northwards of Monte Lauro, or the Sound of Moores, and lye from Monte Lauro west and by south. Also there lye a deale of rocks to the southwards of this Sound of Moores, and right in the midst of the Sound lyeth also a suncken rock about southeast of from Monte Lauro.

For to sayle into Moores.

He that will sayle into Moores, he must bring Monte Lauro northeast and by north of him, and sayle in so right with it, and then he shall not come to neere the fowle ground or dangers: when hee cometh then by Monte Lauro, he shall see the foresayd roeks lying out to the northwardes off Monte Lauro, he must leave them as also the point of Monte Lauro two or three cables lengths on the larboard side of him, and sayle in so alongst by them, untill that hee come past the second poynt, leaving the suncken rock (which lyeth in the midst of the Sound) on the starboard side of him: and when the fisher village which stands to the northwards off Monte Lauro, commeth to stand altogether bare, then he is within the suncken rock which lyeth in the midst of the Sound south and by east easterley from the east end of the foresayd Fisher village.

When you come by the second poynt, you must runne in about it within a cables length, and edge up to the northwards, untill you come before the village, or up to the westwards before the towne, where you please, and anckor there in 12 or 13 fathom.

For to sayle into Rio Roxo.

If you will sayle into Rio Roxo, then run about without the rockes, which lye to the southwards of the Moores, and goe in southeast and by south, untill that you come before the Haven of Rio Rosso, or Roxo, then you shall see a great many of rockes, lying off from the northland, allmost unto a great rock, or Iland, called Salure: betwixt these rockes that lye out there, and the Iland Salure, you may well run through about to the northwards of the Iland but is very narrow, by reason of the aforesayd rockes, which lye off from the north land, therefore sayle about to the southwards of the same Iland, indifferent close alongst by it; leaving it on the larboard side, or to seawardes of you untill that you see the Sound open, and then runne in keeping the middle of the channell, unto that Iland Roxo, which you shall see lye in the middest of the haven, when you come neere it, you may

may anckor under the ſouthland, there are two Sand-bayes, where is good ancker ground.

About two leagues ſouthweſt from Rio Roxo lyeth a ſuncken rock, Iohn Claeſz. Bors of Sardam, did ſayl upon it, and there loſt his ſhippe the 20 of February 1613 in the night,

Ponte Vedra. M. Carbela Blydones.

From Rio Roxo, or the Iland Salure, unto Ponte Vedra, or the Iland Blydones, the courſe is ſouthſoutheaſt foure leagues, betwixt them both lyeth an Iland called Monte Carbela; within it, it is three fathom deepe. Right before the haven of Ponte Vedra lyeth the Iland Blydones which men may ſayle round about. On the north ſide it is not deeper then five or ſixe fathom. There lye alſo within the Sound, on the north ſide two rockes called the Boos or Oxen. On the ſouth ſide of Blydones is the right fareway for to ſayle into Ponte Vedra, this haven lyeth in northeaſt untill within the Iland; ſomewhat furter in the midſt off the haven lieth alſo another little Iland, which you muſt alſo goe the ſouthwards of, therefore goe in eaſtnortheaſt alongſt by the ſouth-land, untill that you ſee the flat tower which ſtandeth upon the ſouth-land, and then you muſt run over a banck, right on with the poynt of Ponte Vedra, within it lyeth the towne, thwart off the flat tower men may anckor in 8 or 9 fathom: This haven is at ſome places foure fathom deepe.

Iland of Bayone.

Five leagues to the ſouthwards of the Ilands of Blydones lye the Ilands of Bayone, when men come in out of the ſea, right with them, then theſe Ilands doe ſeeme to be all gray and black rockes, and lye to ſee to, as if they were three Ilands, although that the ſea doe run through them, but at one place, betwixt each is a ſaddle or valley.

Within the land adongſt over theſe Ilands, men ſhall ſee two high hills very good to bee known, the eaſtermoſt hath three high hommocks, and the weſtermoſt two with valleys betwixt the hommocks; a little to the eaſtwards off the eaſtermoſt hill men ſhal ſee a white Abbey ſtand againſt the high land, whereby this land is very good to bee knowne.

For to ſaile into Bayone. From the northwards.

You may ſayle within theſe Ilands of Bayona either to the northwards or to the ſouthwards; but at the northeaſt poynt off the Ilands lyeth a rocke under water, about a cables length off from them, where of you muſt take heed, and anckor in 10, 11, or 12 fathom on the eaſt ſide of the Ilands.

Vigo. Cannas.

Hee that will ſayle in to the northwards, muſt run in betwixt the Ilands and the maine land, keeping neere about the middle off the channell, but neereſt to Ilands, untill that the Sound off Virgo, or Cannes bee open, and then ſayle in to the eaſtwards, there is a broad Sound, where men may anckor on both ſides, to wit, on the ſouth ſide before Vigo, and on the north ſide before Cannas in twelve or thirteene fathome.

Alſo men may ſayle further in about the ſout poynt off Rondella, where men may ſave a ſhippe in the oaze, without anckor or cables.

At the point of Vigo lyeth a little Iland, he that commeth in to the northwards of the Ilands, and is bound in for Bayone, may ſayle through betwixt that little Iland and the point Vigo, right in with Bayone, to wit, alongſt a little to the weſtwards of the poynt, untill hee come before the towne, and anckor there in 4, 5, or 6, fathom.

Betwixt that foreſayd little Iland, and the poynt of Vigo, it is at high water 4 fathom and a halfe, and at low water 3 fathom and a halfe deepe, men muſt (ſayling through there) give the poynt off Vigo a birth, becauſe off ſome ſuncken rocks that lye off from it. When that men lye in the roade before Bayone, in 5 or 6 fathom, they may ſee the Ilands of Blydones through betwixt the foreſayd poynt of Vigo, and that little Iland.

From that ſame little Iland lieth to the weſtwards another little Iland or rock, betwixt them both it is fowle, ſo that men cannot ſayle through betwixt them, and from that weſtermoſt little Iland lyeth a fowle riffe or ledge of rockes, ſouthweſt off towards the poynt of the land off Bayone, where of men muſt take very good heed, wheter you come from the northwards and will ſayle through betwixt that riffe and the Ilands off Bayone, or els come in from the ſoathwards, betwixt the Ilands and the maine, and will goe in for Bayone.

That riffe lyeth at low water at many places dry, the outermoſt rockes there of, and the poynt of Bayone, where the Caſtle ſtandeth upon, lye ſoutheaſt and ſoutheaſt and by eaſt, and northweſt and northweſt and by weſt an Engliſh mile aſunder, therefore he that commeth from the northwards, and will goe into Bayone to the weſtwards off that riffe, that is betwixt the riffe and the Ilands let hem goe ſo long to the ſouthwards, untill that the Caſtle of Bayone come to be e. ſ. e. and eaſt and by ſouth from him, and ſayle then towards it, and then he ſhall run farre enough alongſt to the ſouthwards of it.

At the ſouth end of the Iland of Bayone, lyeth a great rock, with a deale of ſmall rockes round about it, men may ſayle very cloſe, alongſt by them, but at high water the outermoſts rocks lye under water, where of men muſt be mindfull, cloſe by the rocks it is 20, and 25, and 26, fathom deepe. From the poynt of the maine land over againſt the ſouth end of the Ilands, runneth off a ledge off rocks, whereupon it breaketh very much, when the ſea is grown where of alſo men muſt take heed.

For to ſayle into the ſouthwards of Bel Ilands.

When you come from the ſouthwards, or out of the ſea, and will ſayle in for Bayone, about the ſouthwards of the Ilands with a ſoutherly or ſouthweſt winde, then run right with the ſouth poynt of the outermoſt land of Bayone, untill you come neere about a halfe league off the land, and then alongſt by the ſhore, unto the outher poynt on the ſouth ſide of the comming into the Bay, where that foreſayd riffe runneth off, which lyeth off low, give that riffe a birth, and runneth in betwixt it and the foreſayd rockes at the ſouth end of the Ilands, northeaſt, or eaſtnortheaſt in, according as you ſhall come in out of the ſea, leaving the riffe on ſtarboard, and the rockes with the Ilands on the larboard ſide untill that you come to the end, or to the northwards of the riffe, the north end, or the outtermoſt poynt of that riffe at the ſouth poynt, and the poynt Bayone where the Caſtle ſtandeth upon, lye neareſt eaſt and by north, and weſt and by ſouth a little league aſunder. When as then you have the foreſayd riffe (on the ſouth ſide) upon your broad ſide, or els are too the northwardes of it; and that the Caſtle doe ſtand eaſt, or thereabouts from you, goe then right in with the Caſtle, leaving that fore ſaid other riffe (which lieth off ſouthweſt from the little Ilands at the poynt of Vigo) on the larboard ſide of you. If you bring the poynt of the Caſtle, not to the ſouthwardes of e. ſ. e. then you can not take any hurt of the northermoſt riffe.

The outer rocks of that northermoſt riffe, (which ſhooteth off from the two foreſayd little Ilands) and the riffe, which ſhooteth off from the ſouth poynt of the land of Bayone, where men muſt ſayle through betwixt, lye on from the other ſouthweſt, and ſouthweſt and by ſouth, and northeaſt and northeaſt and by north about an Engliſh mille aſunder. When you come neere the Caſtle, then come no very neere the ſhore, which is not very cleane, and when, as then you come thwart of the innermoſt poynt of the Caſtle before that you begin to ſee the Towne of Bayone, from behind the poynt, you muſt looke well out before you: for from that ſame innermoſt poynt, and from the Caſtle, there lyeth off a ſuncken rock about halfe a cables length from the foreſayd poyt, whereupon remaineth at low water no more then nine or ten foote water, keepe therefore (thwart off it) ſomewhat off from the poynt. When as you begin to ſee the Towne off Bayone, then luffe up ſuddenly ſouth and ſayle before the Towne, and anckor there in five or ſixe fathom, where you pleaſe, or els that the poynt of the Caſtle come againſt the weſtermoſt Iland of the two which lye of from the north poynt of the Bay, or poynt of Vigo, there it is good oaſie ground that holdeth well, ſet your anckers when you morie, northweſt and ſoutheaſt, the beſt ancker to the ſoutheaſt; from thence over the high land you ſhall have commonly the hardeſt windes.

For to ſayle into Vigo or Cannas from the ſouthwards.

If you muſt turn to and againe into the bay, then take very good heed, when you run of from the Caſtle, that you run not to far over ſouthſoutheaſt; right before the Towne, ſoutheaſt and by eaſt, and eaſt ſoutheaſt from the roade about a musket-ſhot, lieth another ſuncken rock, which at low water is uncovereth, it lyeth a ſmall cables length of from a little poynt in the ſouth-poynt of the Bay, whereupon ſtandeth a little houſe, to ſe, to a farre of like a great green rock; you muſt be very carefull of it; eſpecially when you runne over towardes the ſouthſoutheaſt.

But hee that is bound into Vigo or Cannas to the ſouthwardes of the Ilands, ſhall ſayle in betwixt that ſouthermoſt Iland and the poynt of the land of Bayone, all alongſt in the middle of the channel, northeaſt, or northeaſt, and by north in, at leaſt two great leagues, keeping the norther haven two ſhippes length open, ſo long untill Cannas come to the northland without the poynt of Vigo: and then hee muſt leave the poynt of Vigo on the ſtarboard ſide of him, and run in (keeping the middle of the channell) betwixt the northland and the Towne Vigo, and anckor there either before Cannas or Vigo, where hee pleaſeth in ten or twelve fathom.

S. Rego.

A little to the northwards of Camina, lyeth on the coaſt a high ſteep hill, above in the top with a clift or ſaddle, being called S. Rego, it is allmoſt of faſhion like Monte Sauro, but at leaſt once ſo high againe, this hillie a very good mark for to know the places thereabouts. About halfe wayes betwixt this hill and Bayone, lyeth an Abbey upon the ſi-

de of the land, that is alſo a good marke for to know Bayone for him that commeth from the ſouthwardes, but the chiefeſt markes are the two foreſayd high Hilles within Bayone, the one with two, the other with three hommocks, when that with the three valleys or ſaddles is e. ſ. e. from you run in then right with it, you ſhall not faile to fall with the land, right with the Ilands.

Camina. Five leagues to the ſouthwards of the Ilands of Bayone, lyeth the haven of Camina, a broad haven, where you muſt go in (with great ſhips) at the higheſt water. In the havens mouth, which lyeth in northeaſt and by eaſt, lyeth a rock neereſt the ſouth ſide; cloſe to the northwards of this rock, is the deepeſt water, for to ſayle in or out. Within in the haven, on the north ſide, lyeth a little Iland, and upon it ſtandeth a little Tower, you muſt keep that over the Tower which ſtandeth upon the north land, and ſo muſt run in right with them.

In this havens mouth is at halfe flood two fathom water.

At the north ſide of the haven it is altogether ſhowld water, and very rocky ond fowle: there ſhooteth off a ledge of rocks, or riffe, whereof men muſt take good heed.

Viana. Seven leagues to the ſouthwards of Camina lyeth Viana upon a river. From the north poynt lyeth off a ledge off rockes thwart over before the mouth of the river, and upon the ſouth ſhore, ſtand two Fiere-towers. If you will ſayle in to the river off Viana, comming from the northwards, or out of the ſea, then run ſo long to the ſouthwards untill that the two foreſayd Fire-Towers upon the ſouth ſide of the rivers mouth, come one to the other, and then run in right with them towards the ſtrand untill that the little Tower upon the north-land come over the two houſes; keep them one to the other, and runne then to the rock with the maſt, and ſayle alongſt cloſe to the eaſtward of it, and then you run in alongſt over the Barre or the ſhowldeſt of the rivers mouth, there is at low water with an ordinary tyde two fathom depth. When you are paſt the foreſayd rock with the maſt then you ſhall ſee yet a head another rock with a maſt or beacon, which lyeth on the north ſide of the river: run in likewiſe cloſe alongſt to the ſouthwards of it, and afterwards indifferent cloſe alongſt by the north-land, untill you come before the Town, there runneth of ſometimes a little riffe which you muſt give a birth to, and anckor before the town. When you lye before the towne, there lyeth a little Iland to the ſouthwards of you, where upon ſtandeth a little Chappell: to the weſtwards of that little Iland lyeth a great Banke, which at low water is uncovered, behind that banck it is five and ſixe fathom, and before Viana ſeven, eight, and nine fathom deepe; when you come in, they may run in about to the ſouthwards of this foreſayd Banck, and come out again before the town, by the little Iland, where the little houſe ſtandeth upon.

When you come in about a bow ſhot within the ſecond rock with the maſt, there you may well let fall your anckor and bring Cables on the ſouth ſhore, and morre there by foure cables.

Men may anckor without in the road in 12 fathom, there is the cleaneſt ground for to take in a Pilot. It is narrow and dangerous barre for to come into.

Villa del Conde. From Viana to Port a Port, the courſe is ſouth & by eaſt 12 or 13 leagues, betwixt both lyeth Filla del Conde, ſeven leagues from Viana and from Metelyn. Villa del Conde is a broad haven, before the havens mouth lye many rockes, where men may ſayle in about them on both ſides, to the northwards or to the ſouthwards of them it is five and ſixe fathom deepe; further in lyeth a banck thwart over the haven of two fathom at high water: within in the haven it is 3 or 4 fathom deepe, on the north ſide it is all full off rocks, which lye moſt under water, but on the ſouth ſide it is deepeſt and ſureſt, and good lying in five and ſixe fathom.

Rockes. Leſens. Foure leagues to the ſouthwardes of Villa del Conde lye out the great rocks, called Leſons, right before a little broad haven of two fathom depth, called Mettelyn and ſouthweſt from the ſouth poynt of the foreſayd rockes Leſons; about a halfe league to ſeawards, lyeth a ſuncken rock under water: betwixt the land and the Leſons it is 6 and ſeven fathom deep.

Port a Port. A league to the ſouthwardes of the rockes Leſons lyeth Port a Port. From the north poynt of the rivers mouth lye off many rockes, allmoſt thwart over the channell. For to ſayle in there, you muſt run in cloſe alongſt to the ſouthwardes of the outermoſt rock, even ſo neere by it, that you may caſt with a ſtone upon it. There ſtandeth a little Chappell upon the north ſhore right againſt the rock with the croſſe, and alſo a little white houſe upon the north ſhore ſomewhat further up upon the river, bring them one in the other, and run in ſo right with them untill you bee paſt the Caſtle. In ſayling in ſo, you ſhall not finde leſſe upon the ſhowldeſt of the Barre, then 17 or 18 foot water at halfe flood, and ſhall not come to neere a ſuncken rock, which lyeth without in the rivers mouth, ſomewhat neerer the ſouth ſhore then the north, whereupon there remaineth at low water no more then 11 or 12 foote water. Being within the Caſtle, goe then right towardes the rock with the croſſe, & ſo cloſe alongſt to the ſouthwards of it, that you may reach it with a boat hoock, or els you muſt run in three or 4 ſhippes lengths to the ſouthwards off it, or alongſt by the ſouth-land, untill you bee paſt the rock with the croſſe, for to avoyd a ſuncken rock, which lyeth thwart of it a little to the ſouthwards of it, and at low water is no more then eight foot under water. Being a little paſt the rock with the croſſe, go then up alongſt in the middle of the channel, untill you come thwart of a great white Tower upon the north-land, there you may anckor in 4 or 5 fathom, or ſayle before the Towne, here it is 3 & 4 fathom deepe. A little paſt the rock with the croſſe is a ſhowld, whereupon remaineth at low water no more then 11 foot water, ſo that with ſhippes that draw 12 foote water, men muſt ſtay for high water, it floweth there ſix foot up and downe with an ordinary tyde.

On the ſouth ſide of the river goeth in alſo a Land-deep to the ſouthwards of the foreſayd ſuncken rock, which lyeth in the rivers mouth, where the Pilots ſometimes bring ſhipps in and out, that is a good channell, and oftentimes it is eaſt to againe of the ſea, ſo that there is no certainty to be Written of it, that men ſhowld truſt upon.

Of the Tydes and Courſes of the ſtreames.

On theſe coaſtes, as on the former, as ſouthweſt and northeaſt moone maketh high water.

A ſouthweſt and northeaſt moone maketh full ſea at the foreſaid places, on the ſea-coaſt, and within the havens a pount later.

A northeaſt and ſouthweſt Moon maketh on theſe coaſts full ſea, like as on all the coaſtes lying on the great ſea, there goe alſo no ſtreames alongſt the land, becauſe (through the ſwelling off the Ocean ſea) the flood commeth right on againſt the coaſtes, and falleth right in and out at the Havens.

Courſes and Diſtances.

From C. de Pinas to Avilles ſ. ſ. w.		3 leagues.
From Luarca to Ribadeus w. ſ. w.		6 leagues.
From Ribadeus to Cape de Brilo n.		8 leagues.
From C. de Pinas to Ribadeus ſouthweſt and by weſt.		13 or 14 leagues.
From Cape de Pinas to Ortegall weſt and by north weſterly		19 leagues.

How theſe landes doe lye one from the other, and from other lands.

From Cape Ortegall to Siverus ſ. w.	5 leagues.
From Siverus to Cape de Prior ſ. w.	5 leagues.
From Cape de Prior to Feroll ſouth and by eaſt	3 leagues.
From Feroll to the Groyne ſouth, and ſouth and by weſt,	3 leagues.
From the Groyne to Ciſarga	8 leagues.
From Ciſarga to Queres, ſouth and by weſt, and ſouthſouthweſt	2 leagues.
From Ciſarga to cape de Bylem, or the eaſt poynt off Monſy, ſouthweſt and by weſt, and weſtſouthweſt,	12 or 13 leagues.
From Cape de Bylem to C. de Coriane, or Torrivian ſouthweſt.	3 leagues.
From Cape de Coriane to Capo de Finiſterre ſ.	3 leagues.
From Cape de Ortegall to Cape de Prior ſouthweſt,	10 leagues.
From Cape de Ortegall to Ciſarga ſ. w. and ſ. w. and by weſt	19 leagues.
From Cape de Prior to Ciſarga ſouthweſt and by weſt,	nine leagues.
From Feroll to Ciſarga weſt and by ſouth	8 leagues.
From Cape de Ortegall to Cape de Corian ſouthweſt & by weſt	31 leagues.
From Cape de Ortegall to Waterford in Ireland north,	168 leagues.
From Ciſargo to Cape Veio north	160 leagues.
From Ciſarga to Silly north and by eaſt	137 leagues.
From Cape de Finiſterre to Moores, or Monte Lauro ſoutheaſt	5 leagues.
From Rio Roxo to Ponto Vedra ſ. ſ. w.	4 leagues.
From Ponte Vedra, or Blydones, to the Ilands off Bayone ſ. ſ. e.	5 leagues.
From Bayone to Camina ſouth and eaſt	4 leagues.
From Cape de Finiſterre to the Iland of Bayone, the courſe is ſ. e. and by ſouth	18 leagues.
From Cape de Finiſterre to Port a Port ſ. ſ. e.	44 leagues.
From Cape de Finiſterre to Avero ſouth and by eaſt	53 leagues.
From Cape de Finiſterre to the Burlings ſouth	67 leagues.
From Cape de Finiſterre to the great Canaries ſ. ſ. w. ſoutherly	307 leagues.
From Cape de Finiſterre to the Salvages ſouthſouthweſt,	273 leagues.
From Cape de Finiſterre to the Ile of Madera ſouthweſt and by weſt ſoutherly	197 leagues.
From Cape de Finiſterre to the Ile S. Michael weſtſouthweſt	247 leagues.
From Cape de Finiſterre to the Ile Tercera weſt ſouth weſt and w. and by ſouth.	278 leagues.
From Cape de Finiſterre to the ſouth weſt point of Ireland n. and by weſt and north	173 leagues.
From Cape de Finiſterre to Cape de Claro North,	173 leagues.
From Cape de Finiſterre to Waterford, or the Southeaſt poynt of Ireland, north and by eaſt	185 or 186 leagues.
From Cape de Finiſterre to the Lizert northnortheaſt.	153 leagues.
From Cape de Finiſterre to the Seames, north eaſt and by north northerly	112 leagues.
From Cape de Finiſterre to Bell-Ile n. e.	122 leagues.
From Avero to the Burlings ſ. w.	20 leagues.
From Bayone to the Burlings ſ. and by w.	49 leagues.

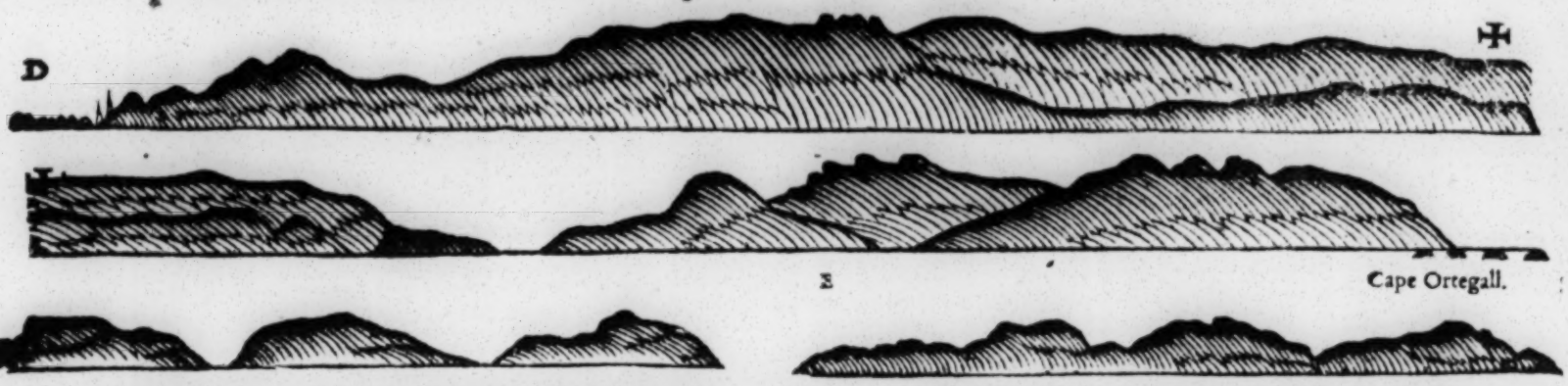
Heights.

Cape de Ortegall lyeth in	44 degrees 5 minuten
Cape de Coriane in.	43 degrees 8 minuten
The Cape de Finiſterre lyeth in	43 degrees.
Bayone lyeth in	42 degrees 10 minuten.

How

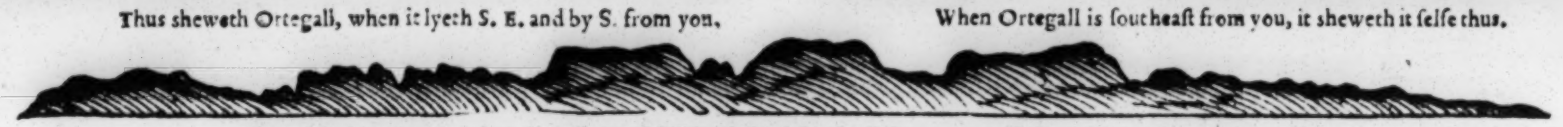
How theſe Lands doe ſhew themſelves at Sea.

Theſe two figures following belong at croſſes one to the other, and ſhew the riſing of the Land, a little to the eaſtwards off the Cape Ortegall, when the poynt marked with D, is five or ſixe leagues, E. and by S. or E. S. E. from you, and the hill marked with E, is S. S. W. from you weſterly.



Thus ſheweth Ortegall, when it lyeth S. E. and by S. from you.

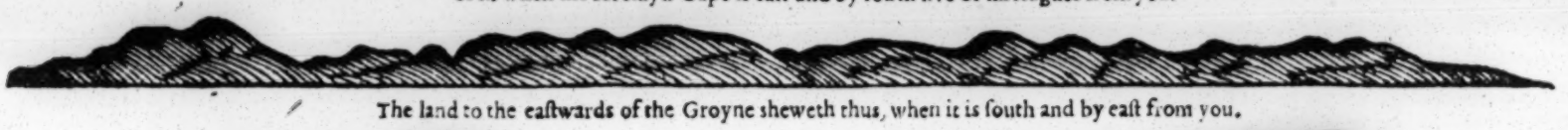
When Ortegall is ſoutheaſt from you, it ſheweth it ſelfe thus.



Thus ariſeth Ortegall, when the eaſtermoſt hill lyeth ſouthſoutheaſt from you, and that you may ſee the eaſt end with cleare ſight, being eight, nine, or ten leagues off at ſea.



Theſe two figures belong at the double croſſe, one to the other, and ſhew the Cape Ortegall, with the land to the weſtwards of it, when the foreſayd Cape is eaſt and by ſouth five or ſix leagues from you.



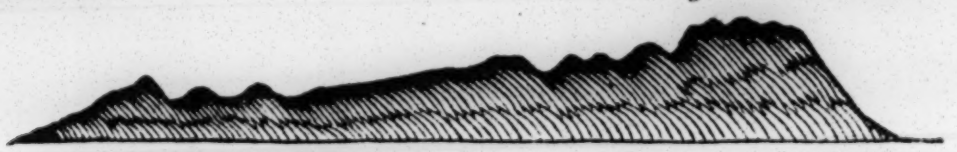
The land to the eaſtwards of the Groyne ſheweth thus, when it is ſouth and by eaſt from you.



Cape Prior the eaſt poynt of the Groyne ariſeth in this forme.



Cape Prior being ſouthweſt from you 6 or 7 leagues ſheweth it ſelfe thus.



Cape Prior, being ſouthweſt and by ſouth from you 4 or 5 leagues, ſheweth it ſelfe thus.



C. Prior.
When the Cape Prior is eaſt and by north, eaſterly 3 or 4 leagues from you, it ariſeth in this forme.



Thus ſheweth the Iland of Ciſarga, when you are one league thwart from it.



Thus ſheweth the land of Monſie, betwixt Ciſarga, and cape de Finiſterre, when you come from the eaſt, and ſayle alongſt by it.



When cape de Finiſterre is ſouthſoutheaſt from you, then it ſheweth thus.



The cape de Finiſterre, being ſoutheaſt ſoutherly from you, ſheweth it ſelfe thus.



Thus ſheweth cape de Finiſterre when it is ſoutheaſt eaſterly from you.



When cape de Finiſterre is S. E. and by eaſt from you, 5 or 6 leagues then it ſheweth it ſelfe thus.

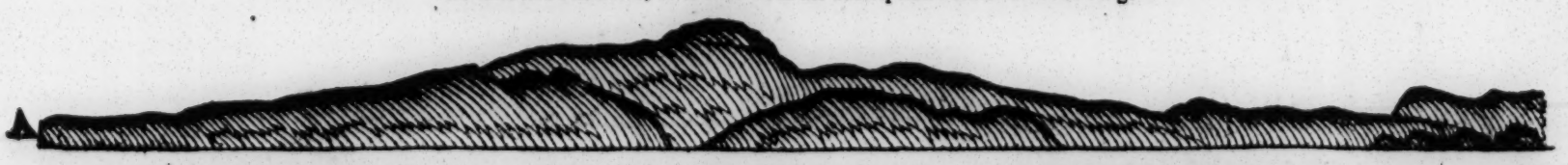


Thus doth cape de Finiſterre ſhew it ſelfe, when it lyeth 5 or 6 leagues eaſt and by ſouth from you.

Mounick.



Theſe three figures following belong one to the other, at the letter A A and B B, and ſhew the riſing of the capes de Coriane and Finiſterre, as is ſhewed in the deſcription here under following.



The cape de Finiſterre ſheweth it ſelfe with the land to the ſouthwards of it, as is portrayed in this and the figure following, when the ragged hill ſtandeth eaſt from you 3 or 4 leagues, and then ſhall ſee the land to the northwards of it, unto cape Coriane, northeaſt, unto paſt cape Coriane, in forme, as in the figure before this.



This followeth the former, and lyeth from the Cape of ſoutheaſt and by ſouth.

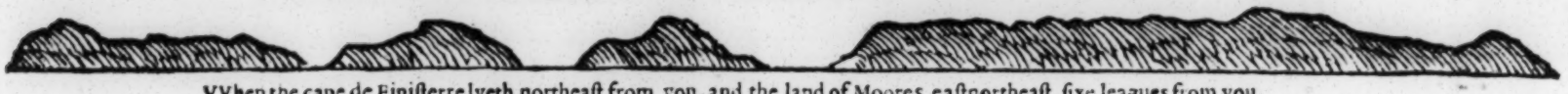


Thus sheweth the cape de Finiſterre, when the ragged hill lyeth eaſtnortheaſt eaſterly from you, and then the land of Moores lyeth from you eaſtnortheaſt, as is here following demonſtrated.





Thus sheweth the ragged hill of the cape de Finiſterre, when it lyeth eaſt and by north from you.



VVhen the cape de Finiſterre lyeth northeaſt from you, and the land of Moores eaſtnortheaſt, ſixe leagues from you, then lyeth the cape in three parts, and the land of Moores thus.



When the ragged Hill betwixt the cape de Finiſterre and Moores lyeth eaſt and by north from you ſix leagues off, then it sheweth thus.



When the high land of Moores is northeaſt and by north from you about 6 leagues, then it riſeth in this forme.

Monte Lauro. The high land of Moores.



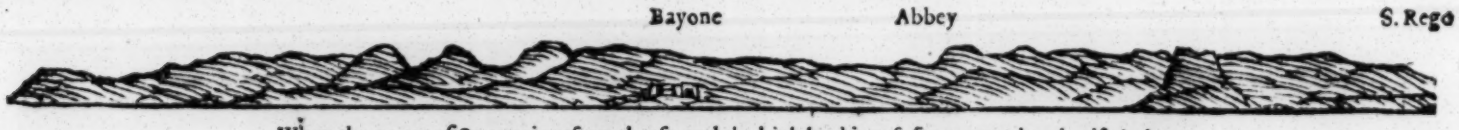
When cape de Finiſterre is northeaſt or northnortheaſt, and Monte Lauro is eaſtnortheaſt five leagues from you the high land of Moores sheweth it ſelfe thus.



Iland of Bayone,

Thus shew themſelves the Ilands of Bayone, and the high land to the ſouthwards of them, when the foreſayd Ilands are eaſtſoutheaſt, a league or two from you.

Bayone Abbey S. Rego



When the poynt of Bayone is eaſtnortheaſt, and the high land is eaſt from you, then it riſeth thus, to the ſouthwards of it lyeth the high Hill of S. Rego.



Bayone Abbey S. Rego

When the high Hill S, Rego is eaſt from you, then the high land of Bayone sheweth it ſelfe thus. The Abbey ſtandeth about halfe wayes betwixt S. Rego and Bayone.

S. Rego.



Thus sheweth the coaſt of Poltingall from Bayone to Cape Montego, when you ſayle alongſt by it, about foure leagues off, the figure following belongeth hereto, at the croſſes one to the other.

Cape de Montego



VVhen that black Hommock where the hand ſtandeth by, is eaſtſoutheaſt from you, then are you thwart off, or open before Avero.

The high land of Viana.



Thus sheweth the Land of Viana, and to the ſouthwards of it the Hommock by B is 2 leagues to the northwards of Villa de Conde.

The high land of Viana.



The land by Viana, and to the ſouthwards of it towards Villa de Conde, sheweth as is portrayed in this and the figure following, by V, is the rivers mouth of Viana.

This

Duytsche mylen 15 voor een graadt- Lieues d'Allemaigne 15 en un d
Spaansche mylen 17½ voor een graadt- Lieues d'Espagne 17½ en un d
Eng en Fra. mylen 20 voor een graadt Lieues Angl. et Franc. 20 en un

Soutlandt
Aveiro
Soutlandt
Lagos
Rio de Mondego
Figuera
St Cruz
Buarcos
Passage
C. de Monego
PORTU
Arbogue
Pemiche
Barlingues

Setubal ofte St Yves
Slot van Palmelo
't Witte huys
't Witte Slot
't Landt van Troiana
Troia
Les Banques
Blauwberch

C. de S. Vincente
Lagos
Villa nova
Silvis
Faraon
C. de S. Maria

Duytsche mylen 15 voor een graadt
Spaansche mylen 17½ voor een graadt
Eng en Fra. mylen 20 voor een graadt

De Custe van
Portugal van Aveiro tot S.t
Vves hoeck Meulpex beschreven
by Iacob A Colom.

Les Costes de Portu:
gal entre Aveiro et
Cabo S.t Vincent

GALLIÆ

PARS

Lisbona

Cabo de Spichel

C. Rexent

Vertooninghe vant landt
Tusschen S.t Vves en
Capo de S.t Vincent

Duytsche mijlen
Lieues d'Allemaigne

C. de S Vincente

De Custe van
Algarve van S.t Vincent
Tot verby Palos

Lepe

Aimonte

Palos

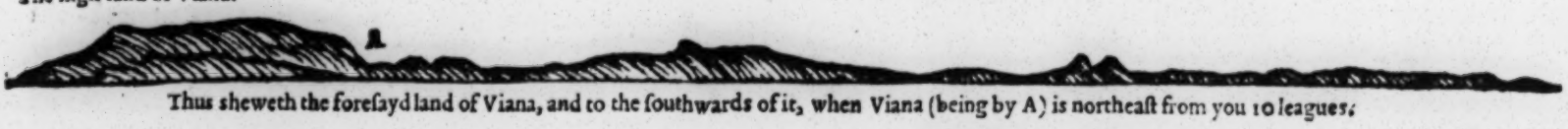
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This followeth the former figure, the Hommock at C is two leagues to the northwards of Villa de Conde.

The high land of Viana.



Thus sheweth the foresayd land of Viana, and to the southwards of it, when Viana (being by A) is northeast from you 10 leagues.

Metelyne thwart from you.



Thus sheweth the land by Mettelyne, when Mettelyne is thwart from you and that you are close by the land.

Castle on the northside of Port a Port, when you come from the northward by the land.

The land to the northwards of Port a Port.



This figure belongeth to the former, and sheweth the forme of the land by Port a Port, and to the southwards of it, when you come from the southwards, you shall see a little village, within the castle of Port a Port, called S. Iohn. A league to the northwards of it lyeth Mettelyn.

The Land to the southwards of Port a Port.

Avero.

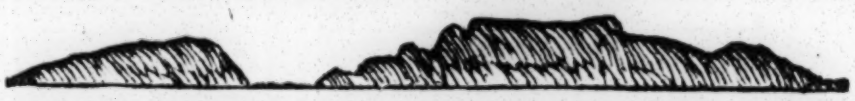


Thus sheweth the land betwixt Port a Port and Avero, when the high land to the southwards of Port is east and by south from you 4 leagues.

Abbey.



Thus sheweth the land of Port, when you come from the southwards.



Thus sheweth the land of Port a Port, when it is eastsoutheast from you about foure leagues.

Viana

Villa de Conde.

Port a Port,



Thus sheweth the land from the northwards of Viana to Port a Port, when you sayle alongst by it.

Port.



When Port a Port is southeast from you seven or eight leagues, then it sheweth with the land to the northwards of it in this forme.

The fourth Demonstration,

In which, the Coastes from Port a Port to Palos are deciphered.

FRom Port a Port to Avero, the course is south, ten leagues: betwixt them both it is all alongst a cleane sand-strand, where men may behold to come neere the shore every where in ten or twelve fathom.

Within the land upon the high land lyeth a black hommock in the land, when that lyeth eastsoutheast from you, then you are open before Avero: when you cannot see the black hommock Cormole, then lyeth there a rough sand-hill to the northwards of the Barre, when that is thwart of you, then are you a halfe league to the northwards of the Bar of Avero.

If you will sayle in over the Barre of Avero, and that you come before it in sixe or seven fathom, then take heed to three beakons made off mast, which stand upon the south-land, bring them one in the other, and sayle in so right with them east and by south, and E. S. E. in over the barre, there is in comming in, at halfe tyde, no more then two fathom water, untill that you come by the beakons, you shall so (being come within the poynts) sayle alongst by a dry sand on the larboard side, edge then up northnortheast, and northwest about by that foresayd dry sand, untill you come close to the norther land, and run in by it, and then you shall leave all other showlds on the starboard side, untill that you see the river open, and then you shall see a little house upon the strand on the west side, goe then from thence op into the river, east and by south, and eastsoutheast, keeping the middle off the channell betwixt the two lands, untill you come before the Saltponds or Avero, where you may lade your ship with salt.

The Coast of Poltingall about Viana, is very good to bee knowne, by the foresayd hill of S. Rego, which is exceeding high, and lyeth on the sea side: the high land of Viana, lyeth two or three double within it.

Betwixt Viana, Villa de Conde, and Port a Port, men shall see alongst the coast many towers and little houses, Villa del Conde men shall see at sea like a great Towne.

The River of Port a Port men may know by the rocks Lesons, they are very high, and lye a little to the northwardes of the River.

The Cape de Montego is a high poynt, and within it in the land are high mountains. The Cape is somtimes taken to be the Rock, but it is easie to be discerned from it, because of the Burlings, which lye here to the southwards, and to the northwardes of the rock.

The cape de Montego lyeth from Avero S. S. W. distant 7 leagues: a league to the southwards off it lyeth Pissage, or the River of Montego, a broad haven. From the Cape de Montego runneth off a rowle ledge of Rocks, a good wayes from the shore, which men must avoyd. Under the Cape men may ride for northerly winds in 7 or 8 fathom, a northnorthwest wind commeth right from the poynt, for southerly windes men may anckor to the southwards off the river of Montego.

From the south point of the river runneth of a sand-riffe, when you sayle in there, and that you come in out of the sea, it sheweth as if you might sayle into the southwards of that riffe, but it is not to be done: you must sayle into the northwards

wards of it. Upon the north poynt ſtandeth a little village S. Catherina, and a little to the northwards of it a Fiſher village, called Buarcos. Upon the north ſide within the havens-mouth ſtandeth a lime kill, with a wood off Fig-trees, when you bring them one in the other, and then ſayle ſo right in with them, you runne in right in the channell, there is ſometimes no more then twelve or thirteene foot water at a halfe flood: you may not certainly truſt to the deſcription of this haven; for in regard it is there ſand-ground, it doth ſhift ſometimes with the great Freſhuts that come of the River, and alſo with ſtormes out of the ſea. From Cape de Montego to Peniche, or Nova Liſbona, (at the Cabo del Fiſiron, which is the poynt within the Burlings) the courſe is ſouthweſt and by ſouth ten leagues, there lyeth of a rock from the poynt, to the ſouthwards of it is a great bay, where men may run in behind it with barks, and lye landlockt. In that bay lyeth a little town againſt the high land called Artogie, a little to the ſouthwards of the cape del Fiſiron lieth a high round hommock, which the Dutchmen call yong Roxent.

From the cape Montego to the Burlings, the courſe is S.W. twelve or thirteene leagues. Behind the Burlings is a good roade and anckor ground, under the great Iland before the Ermitage, then you may anckor in ten fathom, you may come in there from the northwards or from the ſouthwards, it is there broad and wyde, and every where cleane.

From the Burlings to the Rock, or Roxent, the courſe is ſouth and by eaſt, and ſouthſouthеaſt ſixteen leagues, but from the cape del Fiſiron (behind the Burlings) to the Rock, the coaſt lyeth ſouth and north fifteene or ſixteene leagues. The Rock or Roxent is a point of land, very good to be knowne, although you be a great wayes of, yet you ſhall allwayes ſee the ſharpe hommock of the Abbey of Syntra.

Caſcalis. A great league to the eaſtwards of the poynt of Roxent, or the Rock, lyeth the road of Caſcalis, where men may lye landlockt for a northweſt, north, and northeaſt winde, in 12 or 13 fathom, ſo deep, or ſhowld as they will. A great league to the eaſtward of Caſcalis, lyeth the poynt of S. Julian, or S. Gillians, whereupon ſtandeth a ſtrong caſtle, that is the north poynt of the River of Liſbone, the norther channell of the River goeth in within a bowles caſt alongſt by it.

S. Gillias. or S. Gilliens

For to ſaile in at the norther channell. For to ſayle into the norther channell, you muſt run in alongſt within the length off a maſt alongſt by the foreſayd point, but comming before the caſtle of S. Gillians, you muſt edge ſomewhat over towards the Carrich deepe, for to avoyd ſome fowle ground and rocks, which lye on the eaſt ſide of the Caſtle. Being paſt that a little, you may luffe up againe towardes the north ſhore, and ſayle alongſt by it to Reſtiers, and ſo forth even to Liſbone, men doe commonly anckor before the Village of Boelyn in twelve or thirteen fathom. Men muſt take heed not to come into this channell with calme weather, and with an ebbe, which falleth very ſtrong upon the norther Cachops: this channell of S. Gillians lyeth in eaſt and by ſouth; being within, you muſt ſayle up eaſtnortheaſt, and northeaſt and by eaſt, and when you come againſt the Abbey at Reſtiers, then you muſt edge ſomewhat over towards the ſouth-land, els you muſt keepe the north-land alongſt.

For to ſaile in at the Carrick-deepe. For to ſayle into the Carrick deep, you ſhall bring Caſcalis, over the weſt-poynt of Roxent, and keepe it ſo, untill that the little Tower (which you ſhall ſee ſtand above the Abbey at Reſtiers) come over the white Abbey which ſtandeth the fartheſt from Reſtiers, to wit, over S. Katherines Abbey or Cloyſter, goe then northeaſt, and northeaſt and by north in, keeping theſe marks ſtanding thus, untill that you come within the poynt off S. Gillies, and then goe in alongſt by the north-land to Reſtiers within the Caſtle, and anckor there where you thinck it beſt. Upon theſe markes you may ſayle in and out at the Carrick deepe. If you come from the weſtwards, and will goe in to the Carrick deepe, then bring Caſcalis over the weſt-end of Roxent, and ſayle ſo about the norther Cachops, untill that the Town of Liſbone come within two ſhips lengths neere to the ſouth-ſide off the River, and then further in northeaſt and by north, when as then you ſhall ſee the ſand-bay within the poynt of S. Gillians, then are you in the right fareway.

But if it ſhould happen, that you could not ſee the towne, or the little Tower, then keep the ſand-bay (which lieth within S. Gillians point) northeaſt and by north from you and ſaile ſo northeaſt and northeaſt and by north in, and take the ſounding off the norther Cachops in eight or nine fathom: when you begin to come againſt S. Gillians point, ſaile then indifferent cloſe along by the northland, as is beforeſayd.

He that will turne out or in to the Carrick deepe, muſt bring the foreſayd little tower that ſtandeth within the land, a ſhips length to the ſouthwards, and a ſhips length to the northwards off the foreſayd Abbey or Cloyſter off S. Katherines, & then caſt about every time, & ſo turne to and againe out and in.

Alſo come not with calmes in this channel, (neither bound inwards nor outwards) with an ebbe, for it falleth very ſtrong over the eaſt end of the Cachops.

If you will run out at the Carrick deepe, you muſt looke out for the foreſayd litle Tower: when it commeth out from under that high land, bring it then a little to the weſtwardes of the ſecond white Abbey or cloyſter, and goe away ſouthweſt and by ſouth, and then the little tower ſhall come to the Cloyſter.

But if you muſt turne out to and again, then you muſt be very carefull of your tyde, for the ſtreames fall very ſtrong over the Cachops, ſo that it is very dangerous with calmes to come in or out at theſe channels, but eſpecially in ſayling out with an ebbe, for it falleth thwart over the Cachops.

S. Vves point. From Roxent to S. Uves point, the courſe is ſoutheaſt and by ſouth 10 leagues, that is alſo a poynt good to be known, by a high round hill which lyeth on it, alſo men ſhall ſee the top of the caſtle of Siſembre upon a flat hil like a great top or ridge of a country houſe.

S. Uves poynt is called cape de Pitcher, and by the Dutchmen Cape de Spichel, a little to the ſouthwards about the poynt, is a rent or clift in the land, before it is good riding in 9 and 10 fathom. Before Siſember men may alſo anckor in 15 or 16 fathom.

Road under Sint Vves point. Five leagues to the eaſtwardes of cape Pitcher, or S. Uves poynt, lyeth S. Uves, there lyeth a great banck before the havens mouth. Beneath the high land upon the water ſide, ſtandeth a white Caſtle, when that is northnortheaſt from you, then are you right before the havens mouth.

For to ſaile in over the banke before S. Vves. If you will ſayle over the bancks into S. Uves comming of from C. Pitcher, or S. Uves point, then keepe the weſt point off Siſember a ſhips length without the eaſt poynt, and goe then eaſt, and eaſt and by north on, untill that the caſtle of Palmelo which ſtandeth above S. Uves, commeth in a valley over the foreſayd white Caſtle upon the water ſide. Sayle then northnortheaſt right in with them, untill you come within the Caſtle that ſtandeth upon the water-ſide, and then in along within a cables length by the north-land, northeaſt and by eaſt, untill you come before the towne off S. Uves, or Setuball. But when the Caſtle of Palmelo commeth under the land, that you cannot ſee the ſame any more, there ſtandeth alſo a white houſe on the north ſide of the Caſtle that ſtandeth on the water ſide, keepe that then ſo ſtanding, and run in right with them, untill you come within the white Caſtle, and goe then in (as before is ſayd) alongſt by the north-land, untill you come before the Towne of Saint Vves, and anckor by the ſame Towne, before the Fiſher village, in ſixe or ſeven fathom. Vpon the Bancke is at halfe flood three fathom and a halfe water, when you ſayle in over it, you ſhall finde at leaſt ſeven divers ſhowlds. There goeth in alſo a channell alongſt by the ſouth-land, but that is onely for barkes: betwixt the ſouther channell and the right deep lye the banckes at ſome places ſo ſhowld, that they lye allmoſt above water.

For to finde the deepeſt water in ſailing out over the banck of S. Vves, with ſhippes that draw much water, doe thus: when you ſaile out from the white Caſtle, then bring the foreſaid white houſe over the north ſide of the Caſtle, that ſtandeth on the water-ſide, ſo that you may ſee directly through betwixt them, and keepe them ſo ſtanding, untill S. Vves point begin to come without the eaſt point of Siſember, then bring the white houſe to the ſouth-ſide of the Caſtle, and run ſo out, you ſhall have there the deepeſt water. But when you can ſee that Caſtle of Palmelo, that is a direct alongſt marck for to run over the bancke: And then that white Caſtle muſt bee from you N.N.E. northerly.

Saliues. It is from S. Vves point to C. de S. Vincent ſouth and ſouth and by eaſt 29 leagues betwixt both are no knowne havens. Salines a little river lying halfe wayes, is alſo unknown.

From S. Vves to Cape S. Vincent, the coaſt lyeth moſt ſouth and by weſt about 32 leagues, betwixt both lye ſome high ſteep hills, which men doe call the Salines, which are very good marks for to know this coaſt by, but above al ſerve for to knowledge of this coaſt of Algarve, or of the cape de S. Vincent, the Vigheberghen, or Mount Chigo, which lye within Lagos and may be ſeen farre off a ſea. A halfe league to the northwards of cape S. Vincent lyeth a high cliffe in the land, that is ſomewhat whitiſh, and higher then the other land; when you ſee that, then you are by the cape de S. Vincent. Vpon the point of the cape ſtandeth a broken Abbey or Cloyſter, and cloſe by the point lieth a high rock, being called by the Dutch ſaylers Monninck ſtrand.

A little about the point of the cape S. Vincent men may anckor

anckor in a ſand-bay, for a north and northweſt wind in twenty fathom.

Road under Cape S. Vincent.

About the ſecond point, to the eaſtwardes off the cape, is another Sand-bay, there is a good road for a northweſt and N. winde in 14 or 15 fathom. From the Cape de S. Vincent to Cape S. Maries, or Faro, it is eaſt or a little more ſoutherly nineteene or twentie leagues: betwixt them both lye Lagos, or Laves, and Villa Nova. From Cape S. Vincent to Lagos, it is eaſt and by north 7 leagues, there is a tyde-haven through betwixt the rockes, behind a ſtrand of chindle, which falleth dry at low water, men may alſo ride there for a northweſt, weſtnorthweſt, and north wind, in ten or twelve fathom.

Villa Nova

Villa Nova lieth about foure leagues to the eaſtwards of Lagos, betwixt both, three leagues from Lagos, and one from Villa Nova, lyeth a ſuncken rock, where off men muſt take heed. Villa Nova is a good haven, it lyeth in north, and north and by weſt; at halfe flood you ſhall have there two fathom water; within in the haven on the eaſt ſide lyeth a little Iland or rock, and upon it ſtandeth a Tower or little houſe, alſo there ſtands upon the land a great maſt with a barrell upon the top of it: when the little Tower, or little houſe, and the maſt come one in the other, then you muſt ſayle right in with them into the haven, alongſt by the eaſt land untill you be paſt the little Tower, the weſt ſide is flat and ſhowld, when that you come by the maſt, then you muſt goe up to the weſtwards before the Towne of Villa Nova, there you may anckor in foure or five fathom.

Faro.

From Villa Nova to Faro, or cape de S. Maria, it is about 9 leagues. Upon the ſtrand ſtandeth a fire-tower, and from the point ſhooteth off a riffe which men muſt avoyd, into the haven off Faro men muſt goe in from the eaſtwards, it lyeth weſt, and W.N.W. in, and they muſt leave the tower on the larboard ſide, and run in two or three fathom; being within, they may ankor over againſt the Towne off Faro under the Iland in three fathom, it is upon the barre at halfe floot two fathom deepe.

The Cape S. Maries ſheweth it ſelfe at ſea (when you firſt ſee it) in one round hommock, which is a good mark for to know the whole coaſt of the Candado by.

Five leagues northeaſt and by eaſt from Cape S. Marria or Faro lyeth Tavila, that is a crooked ſhowld Barre, which allmoſt every yeare doth ſhift, and is not to truſt to for to ſayle into it, unleſſe it where firſt beakond, or ſet with buyes, it is a halfe flood ſcarce two fathom deepe, men lye there a little within the ſand-hills in foure fathom.

From Tavilla to Ayemont, the courſe is E.N.E. 5 leagues.

Ayemont is a deepe Barre, and one off the beſt havens in the whole Condaet, it lyeth in northweſt by the eaſtland, at halfe flood it is three fathom deepe; there lyeth ſome ſhowlds before the havens, the marckes there off are theſe. There ſtandeth a tree upon the eaſt ſide of the haven or rivers mouth, when Ayemonte commeth right againſt over the tree, then are you to the eaſtwards off the ſhowlds or ſands, which lye before the haven, then you muſt goe towards the foot ſtrand, and leade it in alongſt by it northweſt, and northweſt and by weſt; when you are within, you muſt goe up to the northwards before the Town, or if you wil goe before Porte Maria, the northweſt courſe will bring you there; within it is wide and broad, and ſixe or ſeven fathom deepe.

There goeth in alſo a haven by the weſtland, where men com in, right out of the ſea, but that by the eaſt-land is the beſt.

Leepe.

From Ayemont to Leepe, or S. Michiels the courſe is eaſt and by north ſeven leagues. Leepe hat uncertain bars, which oftentimes ſhift, where men may not truſt themſelves to ſaile into without a Pilot, the Barre that goeth into the eaſtwardes of the great Iland, is held to be the beſt, from thence they muſt goe up to the weſtwards towards Taron, and the River, and ſo come to Leepe, and there they take their lading in before the deepe.

S. Michiels

The Barre of S. Michiels was wont to run thwart over into ſea, and to be at halfe floot three fathom deepe, and before S. Michiels five fathom: from thence men may come through within over the ſhoulds at high water into the River at Leepe.

Taron.

Alſo men were wont to come in by Taron; but for certainty it is needfull to take in a Pilot for theſe Barres.

Palos. Saltees.

From S. Michiels to Palos, or Saltees, the courſe is eaſt and by ſouth 7 leagues, here men ſayle into the great Condaet, this haven goeth in at the weſt end of the Rooduyn, there ſtandeth a great broad tree to the weſtwards off that white cliffe, that you muſt keepe over a red ſand-hill, like as if it where red reath: this ſand-hill goeth ſloping downe: runne in upon theſe markes unto the ſtrand, about north and north and by weſt, then ſhall the tower Odier which ſtands above Wolves, come over the eaſt ſide of the havens mouth, keepe them

VVolves.

ſo ſtanding, and ſayle alongſt by the ſtrand, within two cables lengths untill you come about the poynt, and then you run up north to Palos or northweſt to Wolves, and anckor there in ſixe or ſeven fathom.

It is deepe there within, ſixe, ſeven, and alſo three and foure fathom in ſayling up, according as men doe ſayle farre up, or els not, this Barre is upon the ſhowldeſt at halfe flood three fathom and a halfe, but within it is five fathom deep.

There commeth alſo a channell running out of the ſea betwixt the ſands, then Wolves commeth to the eaſt-ſide of the havens mouth, and men ſayle N.N.W. in, when they are within the havens mouth, then they muſt doe as before is ſayd. This channell is three fathom.

For knowledge of the land hereabouts you: ſhall underſtand that at the weſt end of the Rooduyn, lyeth a white ſteepe land, clyffy, being reddiſh earth or chalke: he that falleth there with, may thinck that he is by the havens mouth of Saltees, upon it ſtand ſome little wood of trees, els the land is all without trees, reddiſh ſand, therefore called Roduyn, or Red ſand-hill.

Off the tydes & courſes of the ſtreames.

A ſouthweſt and northeaſt Moone maketh at all theſe places (on the ſea ſide) high water, and within in the havens a poynt or two later, according as they lye farre within the land.

At all the coaſtes of Portingall, even ſo here alſo on theſe coaſt a S. W. and N.E. moone maketh the higheſt water.

A ſouthweſt and northeaſt Moon maketh on theſe coaſts full ſea, within the havens a poynt or two later, according as they lye far within the land.

A northeaſt and ſouthweſt Moone maketh high water at the C. S. Vincent, and at the Cape S. Maria, alſo on the coaſts lying betwixt them both.

But to the eaſtwardes on the Sondaet maketh full ſea a ſouthweſt and by ſouth and ſouthſouthweſt moone.

Courſes and Diſtances.

From Camina to Viana S.S.E.	——	7 leagues
From Viana to Villa del Conde ſouth and by eaſt,	—	7 leagues
From Villa del Conde to Port a Port S. and by E.	——	5 leagues
From Port a Port to Avero ſouth	——	10 leagues
From Avero to Cape de Montego ſouthſouthweſt,	——	7 leagues
From Port a Port to the Burlings ſouthſouthweſt and ſouthweſt and by ſouth		29 leagues.
From Avero to the Burlings S.W.	——	20 leagues
From Cape de Montego to Peniche, or Cape del Fifiron ſouthweſt and by S.		10 leagues
From Cape de Montego to the Burling S. W.	——	13 leagues
From Cape del Fifiron, or nova Liſbona, to the Rock, or Roxent ſouth		15 or 16 leagues
From the Burlings to the Rock, or Roxent, ſouth and by eaſt, and S. S. E.		16 leagues
From the Burlings, to the C. S. Vincent S. and by eaſt	——	53 leagues
From the Burlings to the great Canaries, ſouthſouthweſt	—	248 leagues
From the Burlings, to the Iland Palma ſouthweſt and by ſouth		256 leagues
From Roxent to the C. Pitcher, or S. Uves poynt ſoutheaſt and by ſouth		10 leagues
From cape Pitcher, the cape S. Vincent ſouth and ſouth and by eaſt		29 leagues
From Roxent to cape S. Vincent ſouth and ſouth and by eaſt		37 leagues
From Roxent, or the river of Liſbona, to the great Canaries S. S. W. weſterly		240 leagues
From the river of Liſbone to the Ile de Salvages ſouthweſt and by ſouth		201 leagues
From the River of Liſbone to Porto Santo S.W.	——	160 leagues
From the River of Liſbone to the Ile Madera S.W.	——	173 leagues
From the River of Liſbone to the Iland Tercera weſt	——	273 leagues
From the cape S. Vincent to Lagos, or Laves eaſt and by north		7 leagues
From Lagos to Villa Nova eaſt	——	4 leagues
From Villa Nova to cape Maria, or Faro eaſt and by ſouth	——	9 leagues
From cape S. Maries, or Faro, to Tavilo, northeaſt and by eaſt		5 leagues
From Tavila to Ayemonte eaſtnortheaſt	——	5 leagues
From cape S. Vincent to cape S. Maria eaſt	——	19 leagues
From cape S. Maries to Leepe, or S. Michiels eaſtnortheaſt	——	17 leagues
From cape S. Maries to Saltees eaſtnortheaſt	——	24 leagues
From cape S. Vincent to cape Cantin ſouth	——	87 leagues
From cape Vincent to cape de Geer ſouth weſterly at leaſt	——	133 leagues
From cape S. Vincent to the Iland Lanzerotte ſouthſouthweſt	——	165 leagues
From cape S. Vincent to the great Canaries, ſouthweſt and by ſouth		210 leagues
From cape S. Vincent to the Ile de Palma ſouthweſt	——	224 leagues
From cape S. Vincent to Porto Santo S.VV. and by weſt	——	139 leagues
And to Madera ſouthweſt and by weſt	——	157 leagues
From cape S. Vincent to the Ile de S. Maria weſt	——	245 leagues
From cape S. Maria to Sibeiona eaſt	——	29 leagues
From cape S. Maria to the Straite E.S.E. and ſoutheaſt and by eaſt		45 leagues
From cape S. Maria to cape Cantin ſouth and by weſt	——	90 leagues
From cape S. Maria to the great Canaries ſouthweſt and ſouthweſt and by S.		210 leagues
From cape S. Maria, or Faro, to the Ile de Madera ſouthweſt and by weſt		93 leagues

Heights.

Port a Port lyeth in	41 degrees
Avero in	40 degrees 26 minuten
Cape de Montego lyeth in	40 degrees 8 minuten
The Burlings in	39 degrees 40 minuten
Roxent lyeth in	38 degr. 53 min. or as ſome hold in 39 degrees
Cape Pitcher, or S. Uves point lyeth in	28 degrees 25 minut.
The C. de S. Vincent and S. Maria lye in	37 degrees

How theſe Lands doe ſhew themſelves at ſea.

C. Montego

The land to the ſouthwards of Montego.



The C. de Montego being northeaſt from you foure or five leagues with the land to the ſouthwards of it sheweth it ſelfe as is portrayed in this and the figure following at the letters AA they belong one to the other.



This belongeth to the former, and is the land to the ſouthwards of Montego, untill thwart of the Burlings.



Thus then shew the Burlings when the northermoſt are eaſt from you a league.

The land betwixt Peniche and Roxent, or the Rock, sheweth it ſelfe as is portrayed in theſe three figures following when the high land to the ſouthwards of Peniche, being called yong Roxent, is eaſt from you, the like letters, as AA and BB belong one to the other.

Yong Roxent.





This belongeth to the former figure, and is the land to the northwards of the Rock, or Roxent.

Roxent.



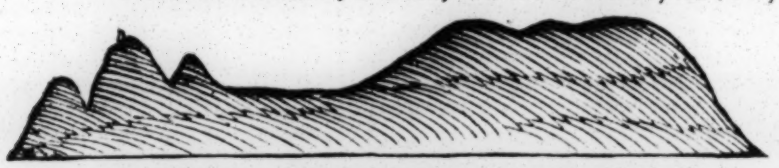
This followeth to the former figure, untill Roxent, or the rocke, at the BB one to the other.

Yong Roxent northeaſt and by eaſt.

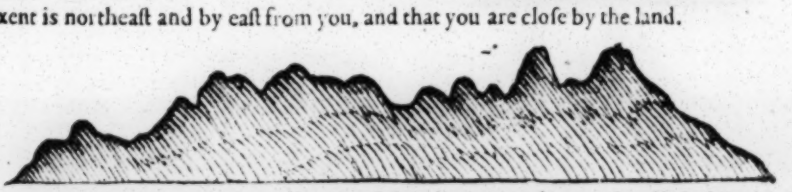
Roxent ſouth and by eaſt.



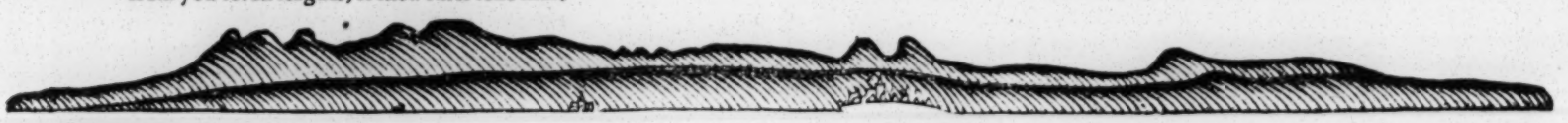
Thus sheweth the Rock, or Oxent, when it is ſouth and by eaſt, and yong Roxent is northeaſt and by eaſt from you, and that you are cloſe by the land.



When the Rock or Roxent is eaſt and by ſouth, and eaſtſoutheaſt from you ſeven leagues, it sheweth it ſelfe thus.



When the Rock or Roxent is northeaſt from you ſeven leagues, it ariſeth thus.



Roxent.

Caſcalis.

The land to the eaſtwards or to the ſouthwards of Roxent towards Reſtiers, sheweth it ſelfe as ſtandeth portrayed in this and the figure following.



S Gillis.

This belongeth to the former.

C. Pitcher.



Thus sheweth the Coaſt betwixt the River of Liſbone, and S. Uves point, called c. Pitcher.

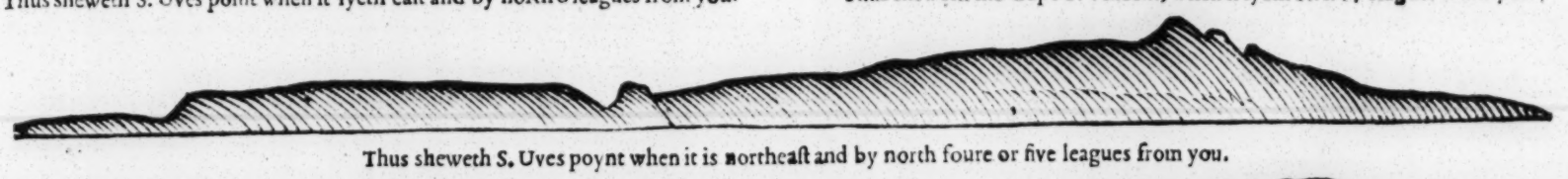
Thus sheweth S. Uves point when you come from the northwards.



Thus sheweth S. Uves point when it lyeth eaſt and by north 6 leagues from you.



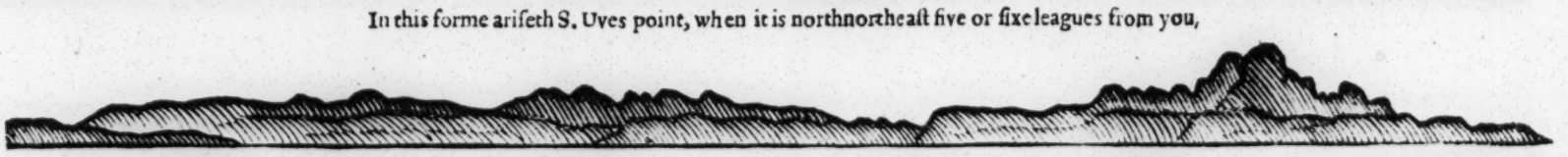
Thus sheweth the Cape S. Vincent, when it lyeth N.W. 7 leagues from you.



Thus sheweth S. Uves poynt when it is northeaſt and by north foure or five leagues from you.



In this forme ariſeth S. Uves point, when it is northnortheaſt five or ſixe leagues from you,



Blew hil.

Salines.

Mount Chigo.

C.S.Vincent.

Thus sheweth the land about the C. de S. Vincent, when you come from the northwards, and ſayle alongſt by it.

Cape S. Vincent

Mount Chigo.

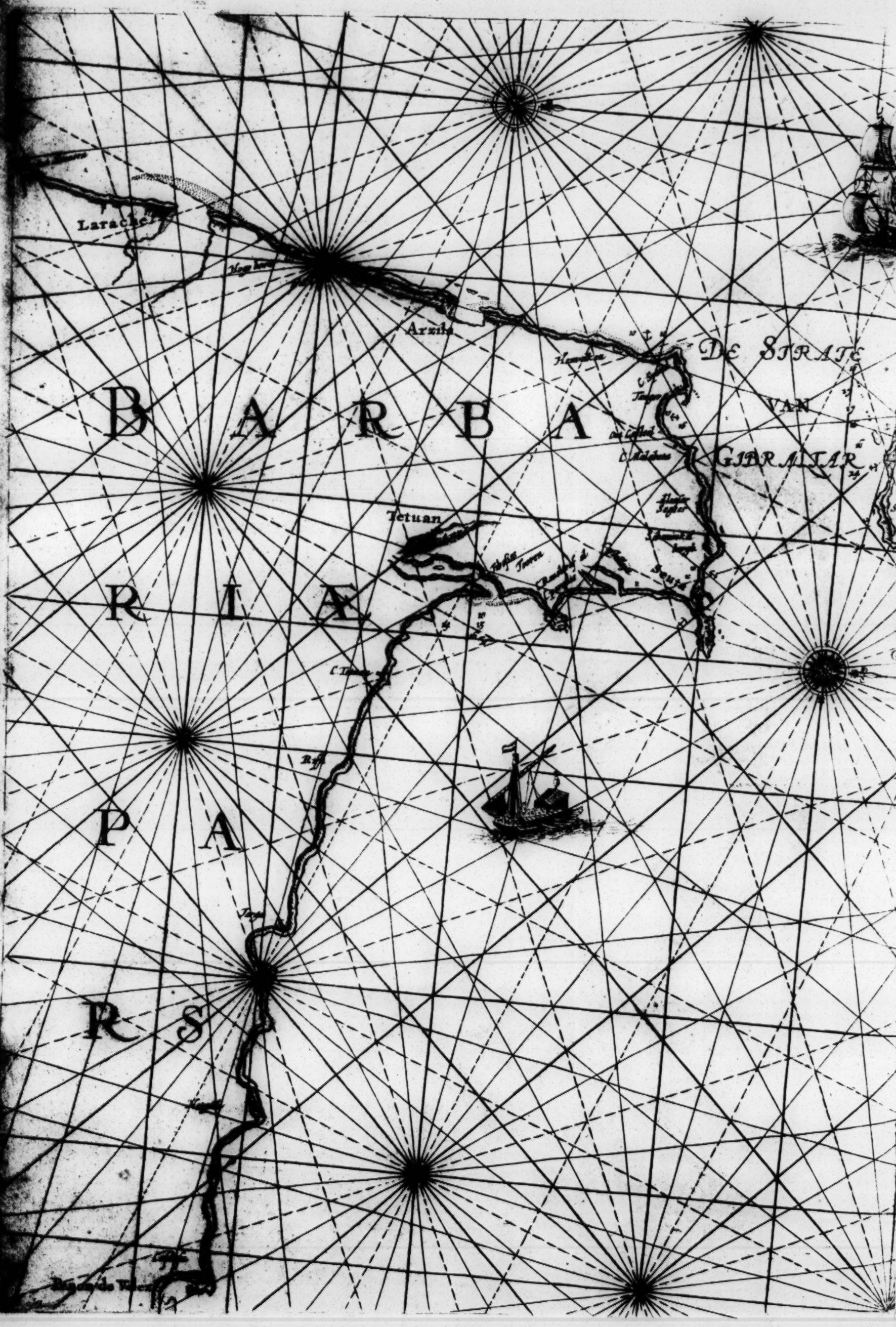


The Cape de S. Vincent sheweth thus, when it is north and by eaſt, and northnortheaſt from you about 8 leagues. The Vighebergh or Mount Chige lyeth then northeaſt and by north from you, in forme as is here portrayed.



VVhen the Vigeberghen, or Mount Chigo is northnortheaſt and northeaſt and by north from you 12 or 13 leagues, it sheweth thus, in one long hill, going downe flat at both ends, with another peece of land, much lower to the eaſtwards of it.

Thus.


Laracher
Arzila
Tetuan
DE STRAET
VAN
GIBRALTAR
BARBARIA
PARS

De Custe van Hispangien vande Riviere van Surilien Tot Malaga ende De Custe van Barbarien van Out Mamora tot Penon de Velez Nieulyex Beschreven door Iacob Aertsz Colom

Duytsche mylen 15 voor een graadt

Spaensche mylen 17½ voor een graadt

Engl en Fra mylen 20 voor een graadt

HISPANIA

ANDALUZIA

PARS

Les Costes Marines d'Espaigne entre la Reviere de Soriban et Malaga et les Costes de Barbaryen depuis out Mamora jusques a Penon d Velez.

BIBLIOTECA
MUSEUM

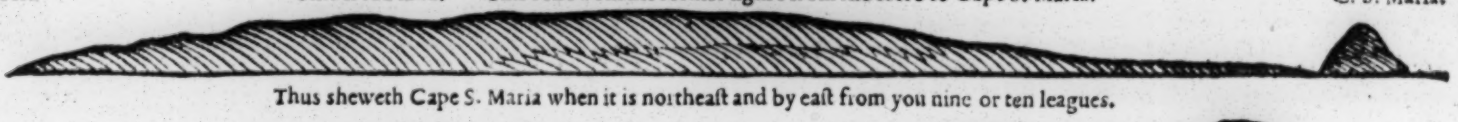


Thus sheweth the Vighebergh, or Mount Chigo, when it is with cleare wether N·N.W. from you 11 or 12 leagues.
Vygheberghen, or Mount Chigo,

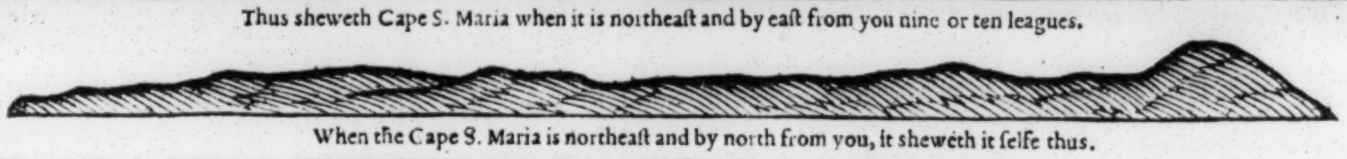


Thus sheweth it ſelfe the land about Lagos and Villa Nova, when you are thwart from Villa Nova, not farre from the land, a little to the weſtwards of Lagos, lyeth a white poynt, where by men may eaſily know Lagos. The Cape S. Maria sheweth it ſelfe then, as in the figure following.





Thus sheweth Cape S. Maria when it is northeaſt and by eaſt from you nine or ten leagues.



When the Cape S. Maria is northeaſt and by north from you, it sheweth it ſelfe thus.

The fifth Demonſtration,

In Which Are shewed the Seacoaſtes off Andaluſia from Palos untill you are paſt the Straights by Madril, and the coaſt off Barbarie lying over againſt it, and alſo the cape Spartell on the coaſt of Barbarie to the ould Mamora.

For to saile into the River off S. Lucas.

FROM Saltees to the river of S. Lucas, the courſe is foutheaſt and ſouthe. and by eaſt betwixt 8 and 9 leag. If you will ſayle into the river of S. Lucas, then ſayle alongſt the red ſand-hills, ſo long untill that you get the towne of S. Lucas in ſight about eaſt ſoutheaſt from you; there lieth a white cloyſter to the eaſtwards of the town, againſt the high land, and there ſtandeth a great tree upon the high land, bring the tree even to the north ſide or the cloiſter, ſo that you may allmoſt ſee through betwixt then but not over the Cloyſter, keepe then ſo ſtanding, and ſayle in right with them, and ſo you ſhall not come to neer the rocks to take hurt of them, and you ſhall have upon the ſhowldeſt at low water and neepe tydes, 3 fathom, and at high water 22 foot, or ſcarce 4 fathom. When the Caſtle off Chipiona and the Church beginne to come one in the other, then you come to the firſt rocks or ſhould, when the Church and Caſtle are right one over the other, then they ſtand ſouthſouthweſt from you, then you are upon the ſhouldeſt of all, but when the Caſtle with the Church come againe one through the other, then you get againe deepe water, 3 fathom and a halfe, and 4 fathom at low water with a neepe tyde, ſayle in alongſt upon the foreſaid markes of the cloyſter and the tree, but take good heed that you bring not the tree over the Quire, at the ſouth end off the cloyſter, for you ſhould then come very cloſe to the rockes, rather bring the tree a little to the northwards of the cloyſter, for you can not lightly take hurt of the red ſand-hils, but you may borrow off them upon your lead in 3 and 4 fathom. There ſtands alſo a mill to the eaſtwards of the towne, take heed that you bring not that alſo over heround Cloyſter that ſtandeth a litle to the eaſtward beneath at the towne, but keep them a handſpikes length aſunder, and then you ſayl in the beſt deep. But if the foreſayd mill, and that round Cloyſter come one in the other when you ſayle in, then you ſhall (without ſayle) come upon the rocks or ſhowld. When you are within over the ſhowldeſt, ſayl then towards the ſtrand of S. Lucas, untill that you ſee altogether open into the river, for to avoyd the riffe that ſhooteth off from the N.W. point of the river, ſayle on alongſt by the ſhore, and anckor before the little Church with the croſſes (which ſtands below in the Sand-hills) in 5, 6, or 10, or 12 fathom, ſo neere as you pleaſe. Men may alſo turn out at this ſame channell with indifferent ſhips or barks, but they muſt take good heed, it is not there very broad.

For to saile in alongſt by Sipiona

There goeth in alſo a channell by the land of Sipionen or Chipiona, for to find it, you ſhall ſayle in within two cables lengths neer by the foreſayd land, untill that you be within the ſecond ſhowld, then you muſt edge ſomwhat off from the land, untill you come upon the foreſaid marks off the Cloyſter and the great tree, then you muſt run in alongſt upon them, as is before taught. The river of S. Lucas is good for to know, by the Rooduyn, or red ſand-hills which lyeth to the weſtwards of it.

Cales,

From Sipionen to Cales Males, the courſe S. E. 9 leagues. Cales is knowne by the mountaine off Granade, when that is eaſtnortheaſt and eaſt and by north from you, ſayle then right in with it, and you ſhall not ſayle to fall right before Cales. At the point off Sipiano lye many rocks above water, and betwixt the poynt off Sipiona and Cales. Foure leagues from Sipiona lyeth Rotta, there ſhooteth off a great ledge of rocks from the poynt.

For to saile into the bay off Cales, Los Puercos.

He that will goe into the bay of Cales, let him run in right with the rockes which lye on the weſt-ſide of the Bay, being called los Puercos, and within two cables lengths in alongſt by them in 6 or 7 fathom, untill he come before the town of Cales, and anckor there ſo deep as he pleaſeth, in 8, 10, 12, or 15 fathom, the fareway lyeth moſt eaſtſoutheaſt and ſoutheaſt and by eaſt.

Diamant.

There lyeth a rock under water, called the Diamant, about N. N. E. and N. E. and by N. from the Puerco, a great half league. When S. Katharins chappell upon the northland is E.N.E. from you, then are you thwart of that rocke, there is at halfe flood 3 fathom water upon it, the marks off this rock are theſe: When Mary Church cometh over the north end of Cales, (that is a Cloyſter which ſtandeth without Cales) there ſtands alſo a houſe upon the hill, where men goe alongſt by, when they goe to Sheres, when that houſe commeth over the chappel which ſtandeth upon the water ſide, to the weſtwards of Marie port: when theſe markes come together one in the other, then you ſhowld ſayle upon the foreſayd rock, there is upon the ſhowldeſt of it a high water, 3 fathom and a halfe water upon it. But ſet the two high hills which are to the ſouthwards of the way of Sheres, that they bee a little aſunder, and that they doe not come one in the other, then you cannot ſayl upon this rock. The Puercos rock lye from the north poynt off Cales about halfe a league. He that lies before Cales in the road, hath Puntall ſouth from him, or there abouts, according as he lyeth neer to Calles. But to the ſouthwards of Cales lyeth a rock, come not neerer that then in ſeven fathom.

Marcks of the Diamant.

The Bay of Cales is wide and broad, men lye there in 5 and 6 fathom, the northweſt wind commeth there open in. If any man therefore would goe further in behind Puntall, let him goe in S.E. betwixt the point off Port Real and Puntal, and run up about the point off Puntall, there men lye land-lock for all windes: there men may lay thier ſhips dry a ground for to make clean. He that will goe into the Creke, muſt take a Pilot, and run up into the water of Port real leaving the little Iland on the larboard ſide, and then Herods Creeck ſhall upon it ſelfe, and there hee muſt ſayle up, keeping the middle of the channell, till the come before the Saltheaps.

To ſayle from Cales to the Strait.

For to ſail from Cales to the Strait, men muſt goe away ſouth, and ſouth and by eaſt to the C. de Trafalgar, and then they ſhal run far enough without the banck or rocks which lye of ſoutheaſt from Cales. From the point of S. Sebaſtian to Cape de Trafalgar, which is the northpoynt of de Strait on the weſt ſide it is S.S.eaſt, 10 leagues. About two leagues to the northwards of the Cape, lyeth Conil, there is a faire ſand-bay, where men may anckor in 12, 13, and 14 fathom clean ground.

Hee that deſireth to ſayle into the Straite of Gibraltar, comming from Cales, let him goe from the point of S. Sebaſtian, which is the weſtermoſt poynt of the Iland Cales,

ſouth and by eaſt, and ſouthſoutheaſt, towards the cape de Trafalgar, untill he be a good wayes without the land for to avoyd the Spaniſh coaſt which is fowle there lyeth of weſt and by ſouth from the Iland Tariffe, a banck of ſtones 2 leagues, or two leagues and a halfe into ſea, whereupon is eight, nine, or ten foote water, when it bloweth hard, men may ſee it break. The foreſayd poynt of S. Sebaſtians, and the cape de Trafalgar lye ten leagues aſunder.

Riffe off Tariffe.

When you are then ſomewhat without the Cape de Trafalgar, and ſet your courſe ſouthſoutheaſt, and ſoutheaſt and by ſouth, then you ſhall fall with the land off the Barbary coaſt, within the Cape de Spartell, about thwart off Tangar, lying in a great bight and ſand-bay. Upon the weſt poynt of this bay of Tanger, ſtandeth a Caſtle ſome what high, and yet ſomewhat higher upon the high land, ſtandeth a little watch-tower: but to the eaſtwards of Tanger ſtandeth alſo and old ruinous watch-tower, whereby Tanger is very good to be knowne. From Tanger to Ape-hill, the coaſt lyeth moſt eaſtnortheaſt, and e. & by north, that is the right courſe for to ſayle through the Strait. If you will ſail into the Strait by night, then keepe to the Barbary coaſt, which is very cleane, and there you can take no hurt: but the Spaniſh coaſt is fowle, as is before ſayd. They that will ſayle alongſt by the Spaniſh coaſt, they muſt goe cloſe alongſt by the ſhore, and runne through betwixt the Iland Tariffe and the foreſayd fowle grounds, cloſe alongſt by the Iland, or els muſt keepe farre off from the Iland, for to runne alongſt without the ſhowlds; but in the middeſt, neere a like unto both lands it is Beſt.

Tanger.

Three leagues to the eaſtwards of the Iland Tariffe lyeth the poynt of Cabrita, being the weſt poynt of the great Bay of Gibraltar over againſt the hill of Gibr: a little to the weſtwards of it, is a good road for a northeaſt wind, in 12, 10 and 8 fathom, not far from the ſhore, thwart off a great rock, which lieth cloſe upon the water ſide, a little to the eaſtwards of the fire-tower: A little to the weſtwards of that firetower which ſtandeth upon the foreſayd poynt, is a fair ſandſtrand, betwixt the two towers there you ſhall lye ſmoot for the weſtern grown ſea.

Cape de Brita.

At Gibralter is a faire Bay, almoſt like a haven: if you will anckor in the bay of Gibralter, then ſaile ſo farre into it, untill that innermoſt point of the hill of Gibralter, doe ſtand eaſt from you, thereabouts it is deepe 5 or 6 fathom, and clean ground: towards the mill it is ſhowlder water of 3 fathom. Men lye there in the Bay landlockt for a w. wind, a ſ. winde commeth from the poynt of Gibraltar hill, but a ſouthweſt wind that bloweth there open in. From thence are brought good wines.

When you will ſet ſayle from the road of Gibralter with an eaſterly wind, it is good to beare up ſomewhat before the wind towards the weſt ſhore, and then forth out alongſt by the lee ſhore, for the eaſterley winds do fall with ſuch wirling and foreflaughes, from over the high land of Gibraltar, that you ſhall be hardly able to get out of the Bay alongſt by the high land. When you com from the eaſtwards, and will ſayle out through the Statis, & that you are ſomwhat neere to the Spaniſh coaſt, then you muſt be very carefull, for that you bring the hill of Gibraltar, againſt the high land of Barbary, and in regard the land to the northwards of Gibraltar hill is low, it ſeemeth (to look to) to be nothing els, then as if there were the opening of the Straites. It hath heretofore happened, that ſome which have ſo miſtaken it, have ſayled into the bay, thinking it to be the opening of the Strait, and ſo have loſt their ſhips there. Therefore it is very need, that men take great care not to miſtake themſelves of the hill of Gibraltar, and if men do take heed of it, it is good for to know.

Bay off Gibraltar.

Eſtepona lieth 5 leagues to the eaſtwards or to the northwards of Gibraltar, betwixt them both ſtand divers firetowrs upon the coaſt, there is clean ground for to anckor. If you will anckor to the eaſtwards of Gibraltar, by the next tower of Gibraltar, then bring Gibraltar ſ. ſ. w. from you, and anckor in 25 fathom, there is cleane ground, and black ſand, but if you will anckor by the ſecond firetower, there is a falley, and there you may fetch water, and anckor in 20 or 22 fathom, there is a valley, & there is alſo clean ground, and better lying for to ſet ſail with eaſtly winds, for thoſe that are bound out of the Strait Before Eſtepona men may anckor in 14 fathom, that is a place for to lade fruite and wines; 5 or 6 leagues to the eaſtwards of it lieth Marveles, betwixt them both ſtand 5 watch towrs upon the coaſt.

From Gibralter to Marveles, the courſe is n.e. and by n. diſtant 12 leagues, if you will anckor at Marveles, then you muſt look out for two Pack-houſes which ſtand upon the ſtrand and a great eſquare watchtower cloſe to the eaſtwardes off the foreſayd Pack-houſes: bring the gate of the towne ſo, that you may ſee through betwixt the Packhouſes and the watchtower, and anckor there in nine or ten fathom. Right before Marveles, the ground is not cleane. About a ſhot of a Caſt peece to the weſtwards of the town, men may fetch freſh water.

Marveles.

From Marveles to Fangerola it is 5 leagues e. n. e. betwixt them both ſtand alſo 5 watch-towers. Fangerola is a caſtle, and hath a faire ſand-bay, there is good anckor ground in 7, or 8 fathom, a flat riſing ground, men may lye there landlockt for a weſtſouthweſt wind.

Fangerola.

From Fangerola to C. de Mol, the weſt poynt of Mallaga, the courſe is forth e. n. e. two great leagues: but from the w. poynt of Mallaga to the town of Molling, the courſe is n. e. and n. e. and by e. 4 leag. it is there betwixt them both a faire ſtrand where men may anckor all alongſt in 10 or 12 fathom.

C. de Mol.

Mallaga.

Mallaga is knowne by theſe markes: There ſtandeth a Caſtle to the eaſtwards upon the high land, and there come 2 walles downewards towards the ſea to another Caſtle which lyeth by the water-ſide. Before that ſame Caſtle is now the road, that which was wont to be the right road, is now altogether ſpoyled by caſting of ballaſt.

If you will anckor in the road before Mallaga, then anckor in 10, 11, 12, or 14, fathom, thwart off from the head, of: that the head com to lye from you north and by eaſt, there is very good ground, the ankors hold there well, alſo men lye there out of danger for the Mores.

Velez Mallaga lieth from Mallaga eaſt and by north diſtant 7 leagues, betwixt them both men may anckor all alongſt by the ſhore. About a league to the weſtwards of Velez Malaga ſtandeth a little Caſtle; before it is good Anckoring in 10 or 12 fathom. By the next Tower, to wit, the next to the little caſtle, there is freſh water to be gotten on the land.

Velez Malaga.

Te towne off Velez Malaga lyeth about a league within the land; but upon the ſtrand ſtandeth a great Packhouſe which to ſee to, is like a caſtle.

If you will anckor at Velez Mallaga coming from the weſtwards; then you muſt give the weſt point a birth; there lyeth of a bancke a good wayes into ſea by the watch-tower which ſtandeth below, to the weſtwards off Velez Mallaga: but if you run alongſt by the ſhore in 10, or 11, fathom, without comming neerer the ſhore, then you can not take any hurt in the foreſayd banke or riffe. When as the towne of Velez Mallaga commeth a little to the eaſtwards of the foreſayd Pack-houſe or tower which ſtandeth upon the ſtrand, then Anckor in 12, 10, or 8, fathom, it is there all cleare and cleane ground.

The coaſt of Spain from Malago to Modril.



From Velez Mallaga to Almunecar, the courſe is eaſt, 15 or 16 leagues, betwixt them both it is all cleane Coaſt, men may ankor there under all the poynts which lye betwixt themboth.

Two great leagues to the weſtwards of Almunecar lyeth a poynt, whereupon ſtandeth a fire-tower, under it is a good road for a weſt wind.

If you will anckor at Almunecar, then anckor to the weſtwards of the rock, where the little chappell ſtandeth upon in 12 fathom, there is good ground, and ſhall lye there landlockt for an eaſt and weſtnorthweſt wind.

Salobrena lyeth from Almunecar 4 leagues to the eaſtwards, that is a little Towne with a little Caſtle, and lieth upon a hill a little

little about the eaſt poynt of Almunecar, and right before Salobrena lyeth a little Iland, he that will anckor there muſt ankor to the weſtwards of it, there he ſhal lye landlockt for a n.e. wind, & alſo for a w. wind, then he ſhal have ſuccour of the e. poynt of Almunecar. Men may alſo wel ankor to the eaſt wards of that littlelland, but to the weſtwards of it is the beſt road, there lye alſo all the ſhips, they may anckor there in 14 & 15 fathom, clean ſoft ground, in 16 fathom they ſhall lye ſomewhat to farre out. Men may (if need ſo require) run through betwixt the foreſaid little Iland, and the maine land, betwixt them both there is about 16 or 17 foot water, & the littleIlād is round about clean, ſo that men may run very cloſe alongſt by it without feare.

Two great leagues eaſtwards from Salobrena in the ſame bight, a half league from the ſea ſide within the land lyeth Modrill, which hath 2 Churches and ſome trees, thereabouts upon the water ſide ſtandeth a ſquare tower.

If you will ankor at Modrill, then anckor before the foreſayd ſquare towr, which ſtandeth upon the water ſide in 12 or 13 fathom, ſo that you may ſee the little Tower upon the eaſt poynt even without the other poynt, there is cleane ground, men lye there landlockt for an eaſtwind, but a ſouth eaſt and a ſouth wind make there (like as at all places on theſe coaſts) a lee ſhore. A little to the eaſtwards of Modrill lyeth the poynt, called Cape de Sacraſtijſt.

The Coaſtes of Barbarij.

For to ſayle out of the Bay of Gibraltar to Tetuan, then run over ſouth and by eaſt, about cloſe by the pointe of Seuta, eſpecially with a weſterly winde, you ſhoulde otherwiſe be carried away ſo with the current, which then commonly runs to the eaſtwards, that you ſhould fal to farre to the Leewards. Comming then about by the point of Seuta, you ſhall ſee out a head a black point, called cape Porkes, lying ſouth from the poynt of Seuta When men lye in the Bay of Gibraltar, they may ſee
c. Porques. the foreſaid cape Porkes alongſt over Seuta: which is a poynt very good to beknown, ſayl towards that point, and with a weſt wind luffe up ſo neere as you can. When you come about that point, then you ſhall begin to ſe Tetuan, which lieth up againſt the high land, a great league within the land: run then ſo far to the ſouthwards, untill that the eaſt end of the towne come right over a little round hommock, which is upon the high land within. In the middeſt off the towne ſtandeth a black tower, and in the innermoſt land of al within, lye 3 little hills, which doe (as it were) looke over the outermoſt inner land, bring the 3 little hills over the foreſayd black tower, & anckor then ſo farre frō the ſhore, that the firſt litle hil of the high land to the ſouthwards of Seuta towards cape Porques, come a little without C. Porques, there it ſhall be 16 fathom deep, and good ſoft ground. If you anckor otherwiſe then upon theſe foreſaid
Marcks of the roade before Tetuan. marcks, you ſhal have bad, ſtrony & ſharpe ground. It hath happened that ſome ſhips have ankored there, buy their ankors fel ſo in to the rocks, that they could not weigh them again, but muſt hew of their cables, & leave their anckors behinde them. Therefore if you come of from the point of C. Porques, then be carefull that you bring the foreſayd firſt little hommock (which lyeth a ſtearne of you in the bight of Seuta to the S. wards of Seuta) a little without the C. Porques, and ſo keep ſailing to the ſouthwards, & keep heaving of the lead continually without ceaſing untill that you get the ſoft ground, ſo ſoone as you ſhall feele it, let then preſently your ankor fal, for the place
C. Tetuan. wher the ſoft ground is, is not 2 cables lēgth in compaſſe great.

Tetuan lyeth from Seuta a bout 6 leagues, and 3 or 4 leagues to the ſouthwards of it lyeth a point, called cape Tetuan, whereupon ſtandeth a tower. He that hath never been at Tetuan, might eaſily be miſtaken by that poynt, taking it to be cape de Porques, the ſooner becauſe that ſom ſay that Tetuan lyeth at leaſt 9 leagues to the ſouthwards of Seuta. It hath happened that ſhips have ſayled unto this poynt, and have ſo runne paſt Tetuan, therefore it is beſt that men goe not to farre from the ſhore either by night or by day for to get the capePorques certainly in ſight.

The Bay off Tetuan betwixt this cape Porques and cape Tetuan, is a ſand-bay altogether off ſand-ſtrand with low hommocks here and there upon the ſea-ſide, which a farre of ſeeme as if they where ſhipps, but the ground thereabouts is altogether foule, except ſuch a place as before is ſay. Betwixt the Cape Porques and Seuta it is alſo a faire ſandſtrand, but thwart of it is all good ground.

The Coaſt of Barbarie in the Straite off Gibralter, lyeth from Seuta to Cape de Spartell weſt and by ſouth, and weſtſouthweſt eight or nine leagues. But the Cape de Spartell, and Cape de Trafalgar on the Spaniſh ſide, ly north and by weſt, and ſouth and by eaſt eight leagues aſunder.

Arzila. From Cape de Spartel tot Arzila, the coaſt lyeth ſouth and by weſt ſeven leagues, betwixt them both alongſt the ſeaſide it is all lowe land, with ſome poynts and high land within, with a white ſand-hilly ſtrand. A little to the ſouthwards off the poynt of cape de Spartell, men may anckor for eaſterley windes in 12 or 13 fathom, cleane ſand-ground, but ſo ſoone as the winde doth ſhift to the w. they muſt bee ready to get under ſayle, leſt they be inbaye upon a lee ſhore.

About a league to the ſouthwardes of the C. lyeth a little hommock upon the low land, by the water ſide, which ſheweth (in ſayling by) like a broken ſchonce or caſtle.

Arzyla is a little walled town, lying upon the water ſide and hath a little bard haven, which men doe ſayle into at two places through a rouw of rockes, which lyeth before it, the northermoſt channell is the deepeſt, but both of them are not fit but for ſmall ſhippes. Being come within the rocks, men doe anckor betwixt the town and the rockes.

From Arzyla to Alarache, the coaſt lyeth alſo ſ. and by weſt 8 leagues, it is altogether a cleane coaſt with ſome rocks on the ſhore, the land betwixt them both is ſomwhat higher then betwixt Arzyla & the C. with high land within. About an Engliſh mile to the ſouthwardes of Arzyla ſtandeth a tower, and ſomwhat further to the ſouthwards, upon the high land, ſtand ſome little houſes, but men cannot well ſee them, except they ſayle cloſe alongſt by the coaſt. Betwixt Arzyla and Alarache, but ſomwhat neerer Alarache then Arzyla, lieth on the ſea ſide, a high white cliffe which is very good to be known, betwixt that cliffe & Alarache ſtandeth upon the high land a very high tree, with ſome other trees by it, when men come from the n. wards alongſt by the ſhore, that great tree ſemeth to be a tower, yet ſomwhat to the ſ.wards ſtandeth an other great tree, but not ſo great as the other: when men begin to come neere to Alarache, or els by the ſouthermoſt great tree, then the foreſayd greateſt tree doth hide it ſelfe behinde the land. Theſe are all very good marks for to knouw this coaſt by, betwixt deſe 2 places.

Allarache lyeth with a great Caſtle upon the ſ. poynt off a river, which is very ſhowld and crooked, the n. poynt is a low poynt goying flat off, and within it, on the n. ſide of the river ſtandeth alſo ſome buildings. Before the river lyeth a barre of quickſand', which lyeth off from the north poynt, where this ſhips may goe in over with a ſpring tyde, through a Crick, els it is but for Barkes and Friggats: men may anckor before it in the Roade in 16, 17, and 18 fathom. Alarache.

Alarache is under the command of the King of Spaine, and is little or nothing uſed either by Engliſh or Dutch-men.

He that ſaileth alongſt this coaſt, muſt not come very cloſe to the ſhore, unleſſe it were with a hard Levand, or eaſterly winde, with calme weather there goeth ſometimes a very great grow ſea out of the weſt or northweſt, ſo that ſomtimes men can hardly get of from the ſhore.

From Alarache to Old Mamora the coaſt lieth ſ. and by w. and ſ. ſ. weſt betwixt 7 or 8 leagues, it is low land with ſand-hils with few places that are good to be knowen, all alongſt even to Mamora.

He that cometh out of the ſea, and falleth with the land here on this coaſt, ſhal perceive little knowledge of the land, unleſſe hee fall with ſome of the inhabited places. This Old Mamora was wont alſo to be a haven, but is now altogether caſt to of the ſea.

Off the tydes & courſes of the ſtreames.

Before the Gondaet on the coaſt a ſ.ſ. w. and n. n.e. moon maketh high water.
Before Palos Moguer and Wolues maketh full ſea a ſouth and north moon.
Before the river of S. Lucas, and at Cales before the bay maketh full ſea a ſ. w. and by ſ. and n. e. and by n. moon.
At Cales in the Bay maketh high water a ſ. ſ. w. moone.
The ebb falleth without the Puercos to the ſouthwardes towardes the Straet, and the flood towards the land to the northwards: but for the moſt part, the flooth falleth thwart in to the land, about the havens;
In the narrow of the Strait maketh high water a ſ.w. and by ſ. moon. The current runneth more to the weſtwards then to the eaſtwards; when it is faire weather there goeth commonly 4 houres flood to the eaſtwards, and 8 hours ebb to the weſtwards, but the moſt part of the time according as the winde is, and at ſome thime the current runneth ſo ſtrong, that it rippleth as if there where ſhoulds.

Courſes and Diſtances.

From Ayemont to Leep eaſt and by north — 7 leagues.
From Leep to Saltees or Palos, e. and e. and by ſ. — 7 leagues.
From Saltees to the river of S. Lucas, or Sipiona ſ. e. and ſ. e and by eaſt 8 or 9 leagues.
From S. Lucas or the point of Sipiona, to the point of Cales the courſe is ſ. e. 9 leagues.
From Cales to the poynt of the Strait ſ. ſ. e. — 10 leagues.
From Cales to the great Canaries ſ. w. — 240 leagues.
From Gales to the Ile de Madera w. ſ. w. — 200 leagues.
From C. Trafalgar to Tariffe, the courſe is ſ. e. — 4 leagues.
From Tariffe to the poynt of Gibraltar e. and by n. — 5 leagues.
From the point of Gibraltar to Marmels n. e. and by n. — 12 leagues.
From Marveles to Fangerola e. n. e. — 5 leagues.
From Fangerola to the w. point of Mallaga e. n. e. — 2 leagues.
From the weſt point of Mallaga to the towne of Mallaga n. e. and n. e. and by north — 4 leagues.

From the poynt of Gibraltar to Mallaga n. e. —— 23 or 24 leagues.
From Mallaga to Veles Malaga e. and e. and by n. —— 7 leagues,
From Veles Mallaga to Almunecar east —— 15 or 16 leagues.
From Almunecar to Salobrena east —— 4 leagues.
From Salobrena to Modril east and by north —— 2 leagues.
From Modril to C. de Sacrastyf e. s. e. —— 1 league
From C. de Sacrastyf to Castel de Fierro e. and by n. —— 4 leagues.
From Castell de Fierro to Adera east —— 8 leagues.
From Adera to Almeria northeast —— 5 leagues.
From Almeria to C. de Gat s. e. and by east —— 5 or 6 leagues.

From the point of Gibraltar to C. de Gat e. and by n. —— 66 leagues.
From C. de Spartell in Barbary to the point of Apehill, the course is e. n. e. 8 leagues.
From Apehil to the point of Seuta s. e. and by e. —— 2 leagues.
From the point of Seuta to the road of Tetuan s. —— 5 or 6 leagues.

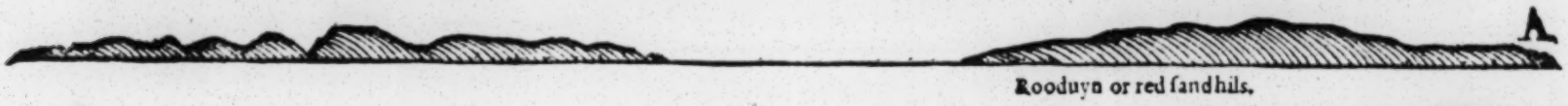
Heights.

The coast of the Condaet lieth in 37 degr. and 15 or 20 minut.
The Iland Cales in 26. degr. 30 minut. The middest of the Strait of Gibraltar lyeth in 35 degr. and 50 min. Cape de Spartell lyeth in 35 degrees, 32 min.

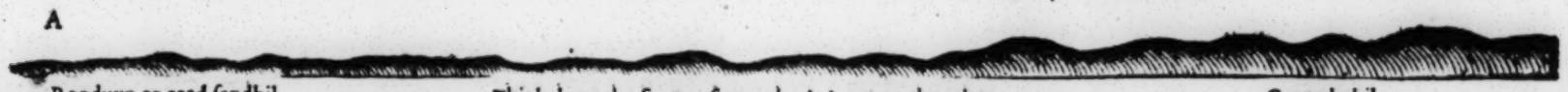
How these Lands doe shew themselves at Sea.

The land betwixt Wolues and the River of S. Lucas, sheweth it selfe when you saile alongst by it like as is portrayed in these three figures following.

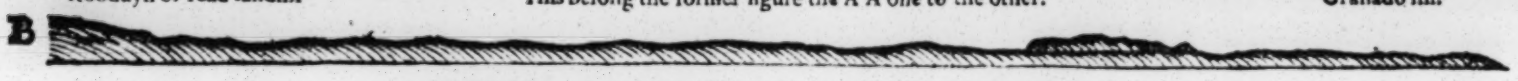
Black land to the northwards of the Rooduyn or the red sand-hils



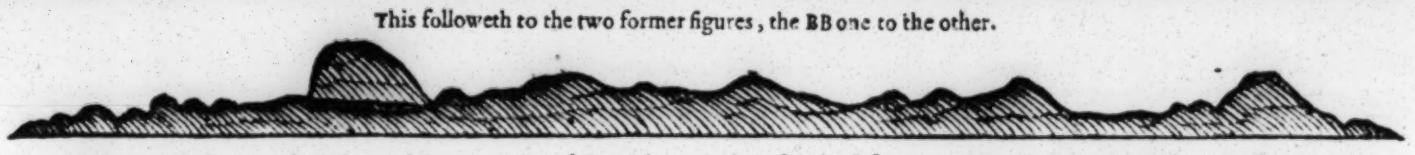
Rooduyn or red sandhils.



Rooduyn or read sandhil — This belong the former figure the A A one to the other. — Granado hil.

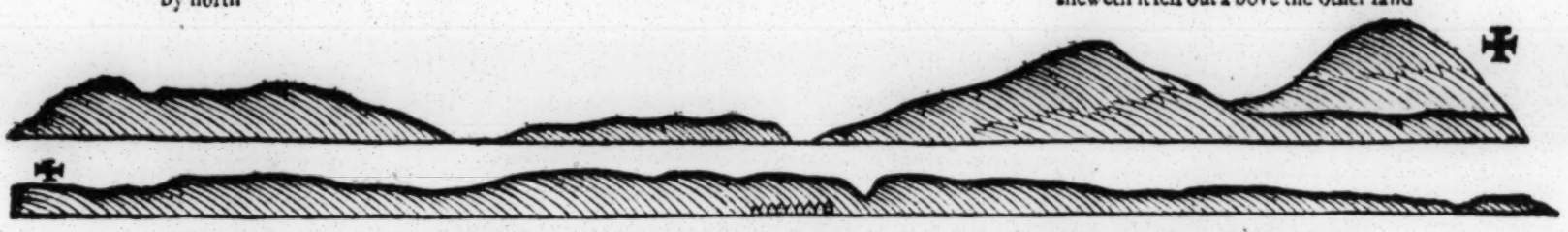


This followeth to the two former figures, the BB one to the other.



When you sayle towards Cales, and the mountaine of Granado cometh to stand east from you then it is sheweth it selfe in this forme.

Cape Spartel east and by north — east and by south 6 leagues. — This hil lyeth farre within the other land, and sheweth it selfe out a bove the other land



The coast of Barbarie from C. de Spartell, the southpoynt of the Strait to the southwards, untill past Alarache sheweth like as it portrayed in these 2 figures when the Cape de Spartell is east and by north from you about eight leagues.

The sixth Demonstration,

In Which Are shewed the coastes of Barbarie from old Mamora to C. de Geer, together with the Flemish Ilands.

Mamora. FROM Old Mamora to Mamora, the coast lyeth alongst south and by west and southsouthwest 7 leagues. Before Mamora is a high broad sandstrand, and is not good to know, when you are somewhat off the land. The best knowledge thereof is this: When you come from the northwards alongst the shore, you have al high land within, that you come leese when you come before Mamora, and when you come from the northwards, you cannot see the river of Mamora open before you bee past it, by reason that it lyeth in to the eastwards, and the n. point is low. When you come somewhat close by the shore, you shall see upon the high land in the Castle of Mamora) which the Spaniards have built there for the defence of the place) a very high mast or stake, which you may see indifferent far off, and when it is cleare weather you may se also the high thick Tower of Sallee to the southwards stand against the land. Before the river lieth a Barre which with a Spring hath 16 and 17 foote, and sometimes more water, the Barre is oftentimes altred by the sea. In the spring it lieth in commonly e. s. e. & thereabouts. In the later part of the yeare it lyeth in more easterly by the casting up of the sea out of the n. In the Summer the windes blow alongst the coast, the most part of the time out of the north, which causeth that the currēt runneth there to the southwards, & in the winter they blow much and strong out of the s. w. and s. s. w. In the winter men must be very carefull to get of betimes when the winde beginneth to come to the south, or s. e. then it is time to get of for then commonly it shifteth to the s. w. and w. s. w. with foule weather, but when it commeth about againe to the westnorthwest, or northwest, then it is like to be good weather againe.

Road before Mamore. The road before Mamora is about a league from the land in 18 and 20 fathom, there is clean sandy-ground.

From Mamora to Salley, the coast lyeth s. w. and by s. and s. s. w. six leagues, betwixt them both it low plaine land, and sandy-strand, with double land within, which is so even and smooth, as if it where planed over. From Mamora not halfe wayes to Sally, the strand ceaseth, and from thence forth to the southwards it is a shore all of black steepe ragged rockes with little hille, so that men cannot judge (when they are somwhat of the land) that is double land within, by the plaines of it. When you are a league or two past Mamora, then you may see very plaine the high thick Tower of Sally, and when you see the foresayd rocky shore you may be sure that you are past Mamora, that steepe rocky shore continueth from thence, until past Fedalle, yet betwixt Fedalle and Sally is here and there a place of white strand, betwixt the rockes, but to the northwards of Salley it is not so, but nothing else then perfect rocks.

Salley. The Towne of Salley hath a little Tower, and lyeth upon the n. side of the river, which is a low plain poynt of sand. The Castle hath also a little Tower, and lyeth over against upon the s. poynt of the River, which is a high rocky poynt. There goeth a wall round about the high thick Tower, and lieth upon a point on the. s. side within the River. Before the River is a Barre which oftentimes with storms out of the sea doth alter ander hift, & is cast to, sometimes the channell runneth by one of the two poynts, and sometimes againe right in the middest of the rivers mouth. Hee that will anckor before Salley, let him bring the foresayd high thick tower (which standeth within on the River) on the poynt of the castle, to wit, over the south point of the River, which shall ten stand from him neere about southeast, and anckor there in thirty, eight and twenty, 24, 20, 18, or 16 fathom, so neere or farre of as he will, there is clean black sandy-ground, nevertheless that the shore thereabouts is so full of rocks and stones. Being come to anckor there men must shoot a shot to cause the Moores to come of. From Salley to the Iland Fedalle the shore lyeth alongst s. w. and by s. about 9 or 10 leagues betwixt them both lye here in the sand-strand, long black rocks (as before is sayd) so that often times men might take it to be Fedalle. The best markes for to know Fedalle by is a wood of trees about a league to the northwards off Fedalle, which standeth below upon the land and sheweth like a barne. When you come sayling alongst close by the land, you shall see it above upon the land, but when you are somewhat of from the land, then you shall see the land within, in above the wood of trees (or Barne as men doe commonly

Fedalle.

Duytsche mylen 15 voor een graadt Lieues d'Allemaigne 15 en un degre

Spaansche mylen 17½ voor een graadt Lieues d'Espaigne 17½ en un degre

Eng en Fra. mylen 20 voor een graadt Lieues Angl. et Franc 20 en un degre

Les Coste… depuis … ques a Cab…

Mamora

Salle

Hoogen toren

Castelli

Toren

Hoeckken

De Schuer 2 mylen

Mogador

C. Blanco

Rocheuren

Cabo Cavilgero

Cleef als Fedale

Emindra

C. Cantin

Rif

Saffia

Mogodor

De Reede van Punte del Gada int eylandt S. Michiels

Punte del Gada

Villa Franca

De Cust van
Barbaryen van out Mamora
Tot Capo Blanco

Asamor
Rivier
Masagam
Steenrijf
Tyte Vervallen Stadt
C. Blanco

De Cust van
Barbaryen van Capo Blanco
Tot Capo de Geer. by
Jacob Aertsz Colom.

Cruzinnen Puchuyssen
S. Cruz
Morro Castel
Buerenmuri
C. de Geer

De Reede voor de Stadt
Angra int eylandt Tercera

Os Ilhoes
Los Frailes

I MADERA
Marafylo
Fonsyael
S. Cruz
Serters

Porto Santo

De
Eylanden Madera
en Porto Santo

41

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monly name it for the likeneſſe of it) alſo there lyeth a little round hommock about foure leagues to the northwardes of Fedalle, which you ſhall ſee above the reſt of the land, when you are ſomewhat off from the land, but when you come cloſe by the land, it hideth it ſelfe alſo behinde the double land. The coaſt betwixt Salley and Fedalle, is very plain and ſmooth double land, ſo that there is not another ſuch hommocke more betwixt them both, as that foreſayd hommocke, and in regard the coaſt thereabouts is alogether ſo plain, without any places good to beknowne, therefore men muſt take the more ſpeciall heed unto ſuch ſmall markes, for not to ſayle paſt the place were they are bound unto.

Monſor. Betwixt the foreſayd Barne or wood of trees and Fedalle ſtandeth alſo a ruinons little Towne fallen downe, in a rough wood, called Monſer, when you ſayle alongſt cloſe by it, you ſhall ſee yet ſome peeces of walles of it.

To the ſouthwards of Fedalle the land is agayne higher, and where the high and low commeth together, it doth make a clift, there by the Iland of Fedalle is good to be known. when that clift is ſ. ſ. e. from you, then is Fedalle thwart of it alſo ſ. ſ. e. from you. If you will goe into Fedalle, then runne right with the foreſayd Barne, or wood of trees, untill you come within a league, or ſomewhat neere to the land, and then alongſt by it, and ſo you ſhall not miſſe the Iland Fedalle, but runne in betwixt it and the maine land, when that you come by the north poynt of Fedalle, then anckor betwixt the ſtrand and the foreſayd north poynt, but much neerer the Iland Fedalle then the ſtraud in ſix, ſeven or eight fathom, ſo that you come to lye with your ſhippe ſo farre in, that foreſayd point of the Iland doe lye n. n. w. from you, then lyeth the foreſayd Barne e. n. e. from you, and Monſor a handſpikes length to the northwards of the Barn or wood of trees; you may alſo anckor in 12 fathom, ſo that the poynt off Fedalle lye weſt and by ſouth from you.

Road under Fedalle. This bight within the Iland Fedalle, is a very bad place to lye in, for although you lye there ſo, that the poynt off the Iland lye northweſt, and north and by weſt from you, and with a cable on the Iland, nevertheleſſe the grown ſea commeth ſo hard rowling in about the poynt of the Iland (when the winde is weſterly) that you might rather deſire to lye in the open ſea, then within the Iland. From the north poynt of Fedalles ſhooteth of a ledge or riffe off rockes a Muſket ſhot into ſea, the moſt of them lye high above water; within the Iland it is very flat towards the ſtrand, the Bay on the land is a faire ſandy ſtrand, there men may get ballaſt from the ſhore, but they muſt bee very carefull to ſtand upon their guard, for there are dangerous people.

Depths & grounds about Fedalle. Before Fedalle, to wit, to the northwards off it, thwart of the wood of trees, and alongſt to Salley, it is all ſhowld water a league or two from the land, all alongſt that diſtance, of it is not deeper then 23, 24, and 25 fathom cleane ſand-ground, thwart of into ſea from Fedalle it is alſo of the ſame depth, but foule ground.

He that will trade at Fedalle muſt anckor ſomewhat farre in, for they have there no Boats, men muſt fetch the Mores aboard with the Boat.

Upon the n. point of Fedalle lieth a high hommock, which ſheweth a far off when men come in, as if it were a caſtle falne down, but it is nothing elſe then rocks. At the ſ. end of Fedalle men may goe over on foot at low water to the maine land, but at high water ſea waſhet through at 2 places, it floweth there 7 and 8 foot up and down.

Anafee. Three leagues ſ. w. and by ſ. and ſ. w. From Fedalle lieth an old ruinous town fallen downe cloſe upon the ſtrand called Anafee, it is a ling town with many towers, amongſt thereſt one high thick tower almoſt like the tower of Salley, but men muſt bee indifferent cloſe by it before you can ſee it. When you are thwart of Anafee, you may yet ſee the wood of trees to the northwards of Fedalle, which ſtandeth then to ſee to from far as a ſayle in the water, 2 leagues to the ſouthwards, (or rather to the weſtwards) of Anfee, or Anafee, is a ſteepe point with red cliffs, which ſeem a far off as if they where houſes, ſuch ſpotters men ſhall find at divers places on the coaſt.

Azamor. From Anafee to Azamor the coaſt lieth ſ. w. and by w. weſterly 18 leagues betwixt them both lieth another fallen place called Lyones. Azamor hath a point lying out on the e. ſide when you come ſayling alongſt the ſhoare from the northwards, Azamor lieth then about or behinde that point upon the ſtrand, but ſtandeth high. A little paſt Azamor lieth a river, and thereabouts are ſome towers in the low-land.

Maſagam. Three little leagues to the weſtwards of Azamor lieth the town of Maſagam, on a white ſtrand cloſe by the ſea ſide this town is inhabited by the Portugals, or Spaniards, it hat no towers, and ſheweth to ſee to off at ſea, in white ſpots againſt the land. When you are thwart off from it, you ſhall ſee to the ſouthwards the high tower of Tyro (which is a town fallen down about 2 leagues to the weſtwards of Maſagam) almoſt like the tower of Anafee. A little to the weſtwards of Maſagam, at the weſtpoint of the Bay, ſhooteth off a ledge or riffe of rocks, almoſt a league off into ſea, whereof the rockes at high water, lie moſt under water, and at low water are uncovered. He that will anckor there, and is not well acquainted, muſt take in a Pilot, which may bring him to a place where is good ankor ground, for although that it be a great Bay, yet nevertheleſſe there are few places where the ground is clean; but is at many places foule, ſo that but few ſhips ſhould beable to lye there in clean ground, when you lie in the right road, then lieth the eaſt point of the Bay eaſt, and the weſt point about n. w. from you.

Tyro. About a leagues to the weſtwards of Tito, lieth a ſteep point, when you come from the eaſtwards alongſt by the ſhoare, you ſhall ſee no more land without the point, untill that you come near it, when you begin to get it upon your broad ſide, then there cometh out to the weſtwards a great ſquare cliff. which is very good to be known, & is whitiſh with reddiſh ſpots, and ſeemeth a far off as if it were a wall. This point is called after that white point, Cape Blanco. About 3 leagues to the weſtwards of this Cape Blanco, lieth a little tower upon the high land, near by a valley called Caſa Cavalgera, and two leagues more to the weſtwards lieth upon the high land another little houſe called Emindra, but you muſt be cloſe by the land before that you can ſee it. From the foreſaid C. Blanco to the C. Cantin, the coaſt lyeth weſtſouthweſt, and ſouthweſt and by weſt about 9 leagues.

C. Blanco. Caſa Cavalgera. Emindra. C. Cantin.

The C. Cantin is an even plaine point, when you are to the northwards of it, it ſheweth flat towards the weſt, and going off towards the ſea: there ſtandeth a fire-tower upon it, but very ſmall, that ſometimes you can hardly ſee it. If you come from the northwards, or from C. Vincent, and are bound to Safia, then ſeth your courſe ſ. and ſ. and by eaſt, and then you ſhall fall with the land 4 or 5 leagues to the eaſtwards of Cape Cantin, or if you ſaile a more weſterley courſe you ſhall runne till you come in the height of 32 degrees and a half, and then the C. Cantin ſhall lie due e. from you, it is better to fall a little to the eaſtwards of the C. then to the weſtwards of it; becauſe the winds blow there moſt common northerly. If you fall to the eaſtwards of the C. the coaſt lieth there ſ. w. and by w. and w. ſ. w. and it is even plaine land. About 10 leagues to the eaſtwards of the C. lieth that little town Tyro, with a high white tower upon the ſea ſide, and 5 or 6 leagues more to the weſtwards (betwixt Caſa Cavalgero and C. Cantin) you ſhall ſee a little bight or bay, thereabouts lie upon the ſtrand by the water ſide, great black rockes, which ſhew as if they were wrakes of ſhips, and then forth alongſt to the C. it is a faire flat ſandy ſtrand from the C. ſhooteth off a ledge of rocks ſomewhat of into ſea, which men muſt avoid when they ſayle about the Cape.

From C. Cantin to the n. point of Safia, the coaſt lieth ſ. or ſomewhat more weſterley. 5 or 6 leagues, betwixt them both it is a ſteep rocky land without ſandy ſtrand, but above upon it plaine and even. A league to the ſouthwards of the C. lieth a riffe or ſhowld by the ſhore, by ſome called the Gold-banke and lieth about a league off from the land: at ſome times of the year there is much fiſh to be taken.

Safia. To the ſouthwards of the Bay of Safia is high uneven, and moſt of all double land, but to the ſouthwards of it, it is even and plain, therby men may eaſily perceive or diſcern whether they be to the northwards of Safia, or to the ſouthwards of it.

For to land or in the Bay off Safia. If you will anckor in the bay or road before Safia, then bring the north point (whereupon ſtandeth a tower) a little more weſterly then n. from you, and anckor then in 18 fathom. Or if you will anckor further in the bay, then bring the foreſaid n. point n. n. w. or a little more northerly from you, and then the northermoſt of the two north points ſhall bee a ſhippes length without the ſouthermoſt or the next unto you, run then ſo farre to the ſouthwards untill that tower where men doe land with the boats (which is a high ſquare tower, ſtanding below even within the wal of the towne) come right over a tower which is faſt to the wall, which commeth of from the Caſtle above to the ſouthwards, ſo that the foreſaid thicke tower below come right over the Haven, betwixt the poynt where the caſtle ſtandeth upon the water ſide, and the rocks where men goe in betwixt. Or elſe anckor that the high Caſtle of Safia ſtand e. and by ſ, and e. ſ. e. from you, there it is ſixteene, ſeventeene, & eighteene fathom deepe, good fine ſandyground. You may alſo anckor ſo farre within in the Bay in 15 or 16 fathom, that the north poynt come te be n. w. & n. w. and by w. from

from you. Theſe are the Summer road. In the Winter men muſt anckor further from the land in 28 or 30 fathom, there the ground is courſe ſand. Men may boldly run in before Safia into the road by night, there is nothing that they need to feare, which may doe them hurt, but the land.

About 2 leagues from Safia, lieth the ſ. point of the bay, which is a low point that lieth out, and two leagues to the ſouthwards of it lieth another ſteep rocky point without ſandy ſtrand. By it goeth in the River Tanſit up into the land unto Marrocos.

From the poynt of Safia to the Iland Mogodor, the coaſt lyeth ſ. ſ. w. 19 or 20 leagues.

Iland Mogodor. Againſt the northeaſt end of the Iland Mogodor, there ſhooteth off from the maine land, a great row off rockes; being hard ſharpe rockes, whereof the outtermoſt, or thoſe that lye next to the Iland Mogodor, lye high above water: He that commeth from the northwards, and will ſaile in behind the Iland Mogodor, muſt runne in betwixt the Iland and the foreſaid rockes, cloſe in alongſt by the Rocks. It is there in comming in, betwixt the Iland and the Rockes five fathom deep. Within the foreſaid rocks lye alſo ſome other Rockes on the larboard ſide, which at high water are under water, and at low water are encovered. When you come to the end off them, you may luffe up about by them towards the maine land, and anckor there within them in three fathom at low water, there is good ſand-ground. But yet nevertheleſſe it is not there very good lying, for by reaſon off the breaking of the Sea upon the foreſayd rocks, there goeth ſometimes a great Sea, ſo that it is not good lying there with a ſtorme, but further in, under the Iland it is good lying in two fathom and a halfe. From the ſouth end of the Iland lyeth off a little riffe towards the maine land allmoſt to the foot ſtrand, and to the ſouthwards off the foreſayd little riffe, lyeth a bancke off from the maine land allmoſt a league off into ſea. If you will ſayle out at the ſouth end, then run alongſt by the ſhoare of the maine land, untill that you bee about the foreſayd riffe; and run out then upon your lead alongſt by the banck, and then you ſhall preſently get deeper water, of 4, 6, 8, and 10 fathom, and then you may ſaile there, where you deſire to be.

C. de Geer. From the point of Safia to C. de Geer, the courſe is ſouthſouthweſt about 43 leagues but from Mogodor the ſame courſe about 22 or 23 leagues. It is there betwixt them bot a faire flat ſand-ſtrand, with double land, which at ſome places is very high.

C. de Taffalana. About eight leagues to the northwards of C. de Geer lyeth a point called C. de Taffalana, under which men may ride in good ſand-ground for eaſt and northeaſt windes. The C. de Geer is lower then the land to the northwards of it, and falleth to the ſouthwards flat off into ſea, which men ſhall firſt perceyve when they come within 3 or 4 leagues of it. About 4 leagues to the northwards of the Cape lyeth a high Hommocke within the land, and further northwards the Land is yet higher; bu[t] when you come thus from the northwards near C. de Geer, you ſhall ſee no more land to the ſouthwards of it. When you come to the point you muſt give the riffe a birth that lieth off from it, and runne about by it; and then forth ſoutheaſt and by eaſt, and ſoutheaſt, 7 or 8 leagues to S. Cruz, and then you ſhall ſee the Moores Caſtle ſtand on the high land: thwart of it lie a row of Rockes, about a Calliver ſhot in length, elſe it is all a cleane and cleare coaſt. For to anckor there in the Bay, runne ſo farre into the Bay, that the foreſaid Mores Caſtle ſtand north from you, and the Chriſtians packhouſes north eaſt, there it ſhall be deepe (to the ſouthwards or the foreſaid row of Rocks) 7 and 8 fathom, the north point or Cape de Geer, ſhall then be from you northweſt and by weſt, there is the beſt road. In the Summer time you may anckor nearer to the ſhoare, untill you come in 6 and 7 fathom. When you ſaile from C. de Geer towards the playe or the Road, you muſt be carefull to keepe cloſe aboord of the land of the Cape, and run alongſt by it, untill you come before the Caſtle. If you runne farre off from the ſhoare, you ſhall with northerley windes (which blow there much) be conſtrained to come in northeaſt, and northnortheaſt, again for to recover the ſhoare, therefore it is beſt to keep cloſe aboard the high land. He that ſhould come into the road here by night, muſt not (upon certain great forfeiture) come nearer the ſhoare then in 12 or 14 fathom.

Riffe of C. de Geer.

Road before S. Cruz.

In this Road muſt be very carefull and ready with their anckors, the ſmalleſt bower muſt be alwaies laid out for the wind which bloweth of the land, and the other anckors to Seawards. The ſhoot anckor muſt bee alwaies ready againſt a ſtorme (which men may very well perceive before by the ſwelling or riſing of the ſea) to bring it out in the ſouthweſt. Alſo it is needfull to keepe the foreſaid to the yard, for to helpe themſelves with it the beſt that they can if it ſhould happen ſhould be forced from their anckors.

In this Bay is much fiſh to be taken, when men lie there in the road, they take their turnes to go out to fiſh.

From the C. S. Vincent South-Weſt and by Weſt 140 leagues, and from the Cape de Finiſterre ſouthſouthweſt and ſouthweſt and by ſouth 232 leagues, lyeth the Iland Porto Santo lying ſoutheaſt and northweſt upon each end of this Iland lyeth a great rock. The road is on the ſouthweſt ſide, to the eaſtwards of the ragged rock, before a little haven where men may lye landlocks with boats. Porto Santo.

Madera. The Iland Madera lyeth from Porto Santo ſ. w. 16 leagues ſouthwards from the eaſt poynt of Madera, lie 3 ſmall rocky Ilands, being called the Serters, the northermoſt is the ſmalleſt, and lieth about a league from the land from the foreſaid point, the ſouthermoſt is the greateſt, and lyeth foure leagues from the land. Hee that commeth from the northwards, or from Porto Santo, may ſayle through betwixt them and the poynt of Madera, it is there betwixt them broad and wide, and alſo cleane and cleare every where, onely at the foreſaid eaſt poynt of Madera lyeth a ſuncken rock, whereof men muſt take heed. Serters.

S. Cruz. At the ſouth ſide of the Iland before the Towne S. Cruz is a good road in 20 fathom, but before Fonſiall is the chiefeſt Road for to lade: to the weſtwards of the Towne lieth a great rock with a croſſe, called the Lion, by is the beſt lying in 30 or 40 fathom.

At the ſouthweſt ſide before Marafilo is alſo good anckoring in ſixteene or eighteen fathom. In all theſe foreſayd places is good ground for to anckor in.

Salvages. Betwixt Madera and Teneriffe lyeth the little Iland Salvages, to wit, ſouth from the Serters forty leagues. North from the northeaſt poynt off Teneriffe ſeven and twenty leagues, and northnortheaſt from the northeaſt poynt off Great Canaries, forty, or two and forty leagues, it lyeth ſouthweſt and northeaſt and is about a halfe league long. The ſouthweſt end of Salvages is foule farre off into ſea, therefore runne rather about to the eaſtwards of it then to the weſtwards. Three or 4 leagues ſouthweſt from that poynt, amongſt other Rockes, lyeth one great rock which ſheweth a for of like a ſaile. Under the ſoutheaſt ſide of the Salvages is a good road for a northweſt and weſt wind.

S. Michiels Madera and the Iland S. Michaels lye northweſt and ſoutheaſt 135 leagues diſtant. At S. Michaels, the road is at the ſouthweſt ſide of the Iland, when you come about one of the two poynts, either from the eaſt or weſt, then you ſhall ſee two little towns. Before the weſtermoſt, called Punte de Gada, or Punt Alagato, is the Road in 20 and 25 fathom. Punto de Gado.

Before the eaſtermoſt little towne lyeth a little Iland, betwixt that and the land of S. Michaels it is 5, 6 and 7 fathom deep. Betwixt theſe two little townes, the coaſt lyeth weſtnorthweſt and eaſtſoutheaſt.

Tercera. From S. Michaels to Tercera, the courſe is northweſt and by weſt foure and thirty leagues. Under Tercera the road is on the ſouth ſide of the Iland, to the weſtwards of the rockes, right before the towne Angra, betwixt two points that lie out, upon each of them ſtandeth a Caſtle for defence of the ſhippes which lye there in the Road, the weſtermoſt of the 2 poynts lyeth a good wayes further out to ſeawards then the eaſtermoſt, and hath upon the end of it, two very high, called Braſil, vvhen you come out of the ſea, either from the eaſtvvards or the vveſtvvards, it ſeemeth a farre off as if it vvere aſunder from the land. Theſe tvvo foreſaid hils upon the poynt of Braſill, are ſo high, that in cleare vveather men may ſee from thence 16 or 17 leagues farre off into ſea. Upon it ſtand tvvo pillars, vvhich men may ſee every vvhere in the tovvne Angra, and a vvatchman thereby for to keepe vvatch, and to give them of the tovvne vvarning of the ſhippes that come about the Iland. As many ſhips as hee ſeeth come from the vveſtvvards or the ſouthvvards, that is, from the Weſt-Indies, Braſill, or the Portingals Indies, ſo many Flags he ſetteth up upon the Pillar tovvards the vveſt, vvhen he ſeeth more then five ſhips, then hee ſeeteth up a great Flagge, vvhich ſignifieth a vvhole Fleet. Likevviſe hee doth the ſame upon the other Pillar tovvards the eaſt, for the ſhippes vvhich hee ſeeth come from the eaſt, from Portingall or from the northvvards, ſo that there cannot a ſhippe come thereabout, but men may ſee it preſently by that token in every corner & ſtreet off the Tovvne. Angra.

For to ſail into the road of Tercera. He that cometh from the eaſtvvards, or the northvvards, and is bound into the Road of Tercera, let him run faire by the land off the eaſt poynt, and alongſt by it unto the 2 little Ilands, called the Ilheos, vvhich lye a little to the eaſtvvards of

the

the road, about a bow ſhot one from the other. Men may run alongſt to the ſouthwards off theſe Ilands, or to the northwards of them, as they will, and alſo betwixt them both. Betwixt theſe little Ilands and the maine land of Tercera, it is a great cannon ſhot broad, and 15 and 16 fathom deepe, thorow betwixt the little Iland it is five and 6 fathom deepe cleane ſand-ground.

Los Frayles. Somewhat the ſeawards of theſe little Ilands, lie 3 or 4 rocks above water, called Los Frayles. Being paſt theſe foreſayd little Ilands, yon muſt ſayle to the weſtwards, until that you come neare to the foreſaid point of Braſill, a little to the eaſtwards of it you muſt anckor before the town of Angra in 10 or 12 fathom, or elſe men lay their ſea-anckor commonly in 16, and their ſmaller anckor towards the land in 8 or 9 fathom. Men lye there landlockt for a ſouthweſt and northeaſt and alſo for an E. N.E. winde, but a S. E. winde bloweth there flat open in. On the weſtſide of the point of Brazill is alſo a great ſandy Bay for to anckor in. Before a village, called S. Martin.

Three leagues to the eaſtwards of the Towne Angra, lieth a bight, called Porto Judeo, there the Spanniards landed with their forces, when they tooke in the Iland from the Portingals.

Hee that will ſayle from Tercera to Fayall, let him ſet his courſe W. S. W. to the E. point of S. Georges, which is from thence ten leagues aſunder. Further betwixt the Pico & S. Georges through to Fayal are 16 leagues it lyeth moſt W. N. W. through betwixt them and the Iland Fayall lyeth to the weſtwards of the Iland of the Pico a great league aſunder of from it.

He that will anckor in the Road of Fayall, let him anckor right before the village of Fayall in 14 or 15 fathom, there is ſandground; but there goeth a hard tide of flood and ebbe.

On the ſ. w. end of the Iland Fayall lieth a little haven; for to ſayle in there, you muſt run in by the S. W. point, ſo long about by the ſhore, untill that you ſee the haven open, ſaile alongſt about by the S. weſt poynt untill that you come in the narrow, betwixt the rocks which lye of from the Weſtſide, ſo ſoone as you come within the rockes, let preſently your anckor fal in 5 fathom, and bring Hawſers on the eaſtſide on land, faſt to the pales, which are there made for the purpoſe: the haven is little ſo that men may lie in it with no more then with 4 or 5 ſhips. Further in it is ſhould water.

Of the Tydes and Courſes of the ſtreames.

On the foreſaid coaſts maketh high water a S.S. W. and S. W. and by S. moon.

Courſes and Diſtances.

From cape Spartel to cape Cantin it is Southweſt ſoutherly.	65 leagues
From cape Spartell to Madera w. and by ſouth and weſt ſ. w.	200 leagues
From cape Cantin to Madera weſt	133 leagues
From cape Cantin to S. Vincent N. ſomewhat weſterly	90 leagues
From cape Cantin to Teneriffe S. weſt and by weſt	142 leagues
From cape Cantin to cape de Geer ſouthſouthweſt	50 or 52 leagues
From cape de Geer to cape de Non ſouth ſ. w. and ſ. and by w.	27 leagues
From cape de Geer to the point of S. Cruz ſoutheaſt	5 leagues
From cape de Non to Oſſin ſouth	13 leagues
From cape de Non to cape de Bajador S. W. and by weſt	69 leagues
From cape de Geer to cape de Bajador ſ. w. ſomewhat weſterly,	93 leagues
From Safia to Madera eaſt and weſt	130 leagues
From cape de Geer to Madera weſt northweſt	133 leagues
From S. Michiels to Tercera northweſt and by weſt	34 leagues
From Tercera to the eaſt end of S. Georges w. ſ. w.	10 leagues
From the eaſt end of S. Georges to Fayal w. n. w.	16 leagues
From Saint Michaels to de cape de Finiſterre e. n. e.	247 leagues
From Tercera to Roxent, or the River of Lisbon eaſt at leaſt,	167 leagues
From Tercera to cape de Finiſterre e. n. e. and eaſt and by north	280 leagues
From Tercera to the Lizart northeaſt and by eaſt.	287 leagues

Heights.

Maſagam lyeth in 32 degr. 46. min.
C. de Cantin lieth in 32 degr. 32 min. the Iland Mogodor in 31 degr. 8 min.
C. de Geer in 30 degr. C. de Non in 28 degr. 32 m. C. de Bajador in 27 degr.

How theſe Lands doe ſhew themſelves at ſea.

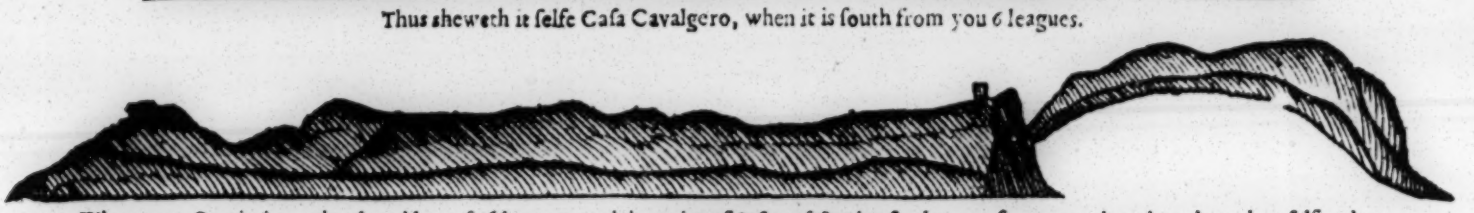
Caſa Cavalgero.



Thus sheweth the land betwixt Maſagam and cape Cantin.



Thus sheweth it ſelfe Caſa Cavalgero, when it is ſouth from you 6 leagues.



When cape Cantin is northeaſt and by eaſt 6 leagues, and the point of Safia eaſtſoutheaſt 4 leagues from you, then they shew themſelfes thus.



Thus sheweth the land to the ſouthwards of the ſouth poynt of the Bay of Safia, when it is eaſtſoutheaſt 3 leagues from you.



Mogodor.

When you are weſtnorthweſt or thwart of from Mogodor. 3 leagues, then sheweth it ſelfe thus. It is a high and double land.



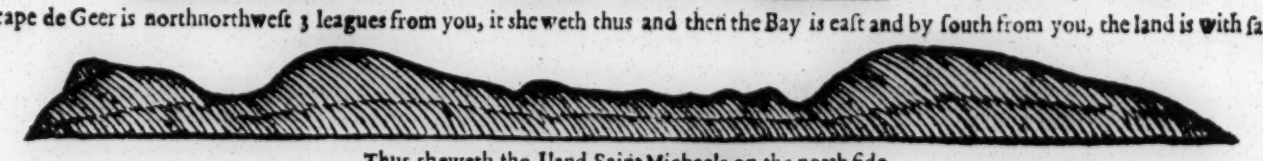
C. Taffelana.

When the cape de Taffelana is northnortheaſt 3 leagues from you, the land sheweth thus unto cape de Geer.



C. de Geer.

When cape de Geer is northnorthweſt 3 leagues from you, it sheweth thus and then the Bay is eaſt and by ſouth from you, the land is with ſand-hils.



Thus sheweth the Iland Saint Michaels on the north ſide.



Thus sheweth the Iland of Tercera, when it lyeth eaſt and by ſouth about 7 leagues from you.



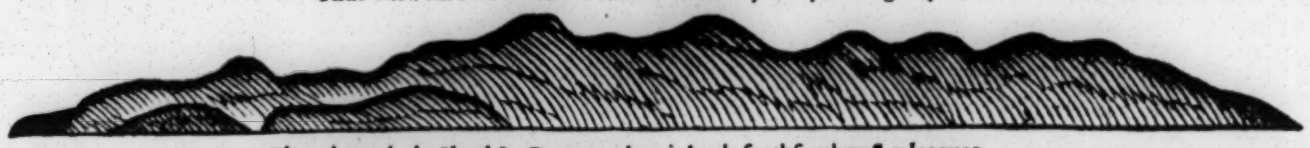
When Tercera is 4 or 5 leagues from you, then it ariſeth thus, the weſt-end of this Iland Tercera is higher then the eaſt-end, thereby it is indifferent good to be knowne.



Thus sheweth Tercera on the north side.



Thus sheweth Tercera on the south side when you sayle alongst by it.



Thus sheweth the Iland S. Georges when it lyeth southsouthwest 7 leagues.



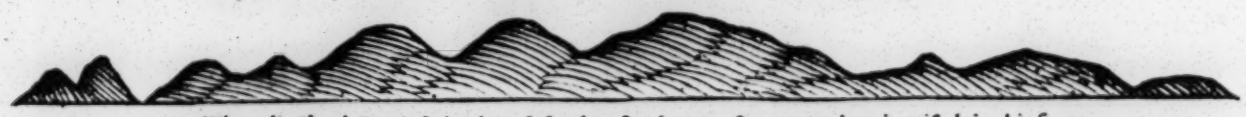
When the west end of S. Georges is south and by east and the east end southeast from you, it sheweth it selfe thus, being 8 or 9 leagues of from you.



VVhen the Iland Pico is southeast from you, it sheweth it selfe thus, the high Pieck you may see about 40 leagues off from it at sea.



The Iland Fayal sheweth it selfe thus when it is south from you 8 or 9 leagues.



When the Iland Gratiosa lyeth west southwest 4 leagues from you, then it ariseth in this forme.

The seventh Demonstration,

In which are to be seene the Canary Ilands.

THE chiefest Ilands of the Canaries are 7 in number, Lancerota, Forteventura, or Porteventura, great Canaries, Teneriffe, Gomera, Palma, & Ferro. The Iland Lancerota lyeth from C. S. Vincent s. s. w. distant about 165 leagues. It hath one haven upon the N. E. end, betwixt the 2 Ilands Alagrance and Gratiosa, where men may come in from the n. wards and lye landlockt for all winds, it is deep there 10, 15, and 20 fathom, and they may saile out again to the s. wards along by Lancerota. At the e. side of Lancerota is a good road before the Towne of Lancerota, there lyeth a banck to the n. wards of it, which men must avoyd, & run about to the s. wards of it there they may anckor in 10, 11, and 12 fathom: on the same s. e. side lye also 2 bad havens a great shot of a cast peece one from the other, the northermost is called Porto de Noas, & the southermost Porto de Cavallos, which we have demonstrated in a large volume in the n. w. corner of this card, and shewed the depths with numb. of feet at high water and spring-tide.

Porto de Naos, the deepest of these bad-havens, goeth in n. w. and by n. betwixt 2 ledges of rockes, there stand 2 beacons of heapes of stones, in manner as the warders of Norway, which you must bring and keepe one in the other, and saile so right in through betwixt the 2 foresaid ledges of rockes. The shouldest of the Barre betwixt the 2 ledges of rockes, is but a short space, a great shippes length long and is deepe at high water 17 foot, and at low water 7 foot, so soone as you shall be over, it will presently 20, 24, 26, and 28 foot deep, then you must edge up n. and then presently n. e. anckor behinde the rockes which lye to the northwards of the Barre, in the Channell the ground is rocky, hard, and uneven. If a ship should come to strike there, it should presently be broken. The ledge is so without as it is within, very steep, so that you may come very close unto it, where the anckors stand marked, it is altogether cleane sandy-ground, 30, and 34 foot deep at high with a sea wind there can goe here a great sea, but that happeneth seldome, for the winds doe blow most out of the n. and n. e. and therefore it is almost alwayes there smooth water. This haven is very narrow betwixt the rockes which lye to seawards of you and the shore, it is but a little more then a great cables length broad, and from the havens mouth to the main land about a Cables length and a halfe. The havens mouth also is not broad, but at high water the rockes doe flow a good wayes on both sides under water, which at low water againe are uncovered.

Betwixt Porto de Naos and Porto de Cavallos lye two little Ilands, the northermost is the greatest, at high water men may goe through with boats within the Ilands, into Porto de Cavallos, but not with shippes, for at low water it falleth dry there within. Upon the southermost little Iland standeth an old Castle fallen downe, which here to fore hath beene spoyled by Englishmen. From the south side of that little Iland shooteth of a riffe, and to the southwards or the westwards of it lyeth in the Barre, which is very narrow, not above ten fathom broad, upon the maine land stand also two little beakons, as at Porto de Naos, which you must bring one in the other, and saile so right in. At high water and spring-tide there is no more then twelve foot water, or a halfe foot more, the ground in the havens mouth is also hard, and nothing else then rocks, where you must goe in over, but within it is cleane sandground, where you may lye a ground without an danger, with a shippe that draweth tenne or eleven foot water. At the highest water, the most part of the rockes on both sides of the havens mouth, lye under water, so that at many places men may goe over them with boats. At low water there remaineth in this havens mouth no more then a foot, or a foot and a halfe depth, so that a shippes boat cannot goe in; within men lye landlockt for all windes, & although it blow very hard, yet the water is alwayes smooth. In both these havens a s. and by w. and n. & by. e. moone maketh high water. Neare the Havens there are no houses where Spaniards or Noores doe dwell, then only by Porto de Cavallos a little Church, where they have Masse sayd on Sundayes, when

shippes

Les Coste[s] de[s]
Forteventura g[ra]
aria Tene[rif]fa I[sla]
Palma et [Ferro]

Gomera

INSVLA
TENERIFA

Do Leeuw

Punta de Negro

I Palma

Vasteroda

Ferro

Groot
Canaria

De
Eylanden
van
Palma en
Ferro

De
Eylanden La
cerota Forteventu
Groot Canarien
Teneriffa en I
Gomera

Duytsche mijlen 15 voor een graadt
Spaansche mijlen 17½ voor een graadt
Engel en Fra mijlen 20 voor een graadt

de Lancerotta.
a grand Can:
ff. I. Gomera.
et Ferro.

De
Ty havens Porto
de Naos en Porto de
Cavallos aende Zuÿd
oostsÿde van Lan:
cerotta

LANCEROTA

Porto de Cavallos

Porto de Naos

Fortevntura

Lancerota

Graciosa

Alegranca

42

MUSEUM

ſhippes lie there. Men go from thence betwixt the Mountaines to the town, which lieth 3 leagues from thence. He that wil come here muſt provide himſelfe with freſh water for there is very ſeldom freſh water to be gotten. Upon this land there groweth neither fruit nor wine. In ſome good years it giveth out Wheat, Barley, and Orſilly, the Inhabitants are Mores under the command of the King of Spanie.

Betwixt Lancerota and Forteventure lyeth a little Iland called Ile Lobos, which is on the outer ſide, to wit, on the northweſtſide, very foule. Men may ankor on both ſides of that Iland in 15 or 20 fathom alſo in 6 fathom a ſhot of a caſt peece ſouthweſt and by weſt from the weſt point of the Iland, there men may lie land-lockt for all windes, except for an northweſt and ſoutheaſt windes. The coaſt of Furteventura is at the northeaſt end very foule, with many riffes that lie out, whereupon the ſea doth break exceedingly.

The land of great Canaries lieth from Forteventura: w. 19 or 20 leagues diſtant. The road there lyeth, at the eaſtſide of the Iland, behinde the northeaſt point, thwart of a Caſtle ſtandeth upon a Chindle. The foreſaid n. e. point, is a very high point, with a long ſmall and low ſandſtrand faſt to the other land; ſo that when it is 5 or 6 leagues n. w. or ſ. e. from you it ſeemeth to be an Iland aſunder off from the other land. If you deſire to go in there into the road, then ſaile about by that n. e. point; alongſt by the Iſolettes, leaving them on the ſtarboard ſide of you, untill that the Caſtle do lie near about n. w. and by n. from you anckor there in 8, 9, 10, or 12 fathom, then lieth the north point n. e. and by n. and the ſ. point ſouthſoutheaſt from you.

At the ſouth-end of the great Canaries is a faire ſandbay called Maſpalomba, there is a good road for ſoutherly windes, and freſh water to be gotten.

The north point of the great Canaries, and the northeaſt point of Teneriffe called Punte de Nago, lie weſtnorthweſt, & E. S. E. diſtant 21 leagues. In Teneriffe is a road on the S. eaſt ſide before the town S. Cruz, there is a faire ſand-bay, a little to the northwards of the town is the beſt road in 20, or 24 fathom, and then Punte de Nago, the N. E. point of Teneriffe lieth n. n. e. from you, and the ſ. point ſ. and by weſt. When the Pico of Teneriffe is w. ſ. w. from you, then are you open before this road of S. Cruz, and when you lie in the Road of S. Cruz, you may ſee the Iland of great Canaries ſoutheaſt from you about 13 leagues.

On the n. w. ſide of Teneriffe lieth the road of Garrichica, from the n. e. point Punte de Nago w. ſ. w. and ſ. w. and by w. 8 or 9 leagues, He that will ankor before Garrichica, let him anckor to the weſtwards of the rock with the croſſe called the Lion, ſo that the foreſaid rock do lie ſ. e. and by e. and ſ. e. from him, then he ſhall lie right before the town, and may ſee right into the ſtreet of the town, thorow the Cloiſter of S. Dominicus there is clean ground in 36 or 40 fathom the Pieck lieth then over the w. ſide of the town, nearer to the land, or to the rock then in 35 or 36 fathom it is not cleane, and weſtwards towards the riffe Lapania it is alſo foule ground. This is a dangerous road, therefore every one that cometh here, muſt be very carefull to have their anckors, cables, and ſailes very preedy & ready for to ſhift roads as ſoon as it beginneth to be a ſtorme.

There is alſo a little haven before Garrichica, where men may lie with a few ſhips. For to ſayle in there, you muſt have a Pilot. On the weſt ſide of the haveus mouth lieth a rock under water, but the ſea breaketh alwaies upon it, you may anckor within in the haven in five or ſix fathom, and muſt bring two ankors out a head to ſeawards, with a cable on the rocks, and an anckor out a ſtearn, on the land, ſo that the ſhips can not wend to & againe. the ground is there foule, you muſt buye up your cables with buyes and cask for to keep them from the ground. This is a good haven in Summer, then it is commonly good weather, but in the winter it is not good to come in there with a ſhip, for the grown ſea out of the n. w. commeth running in there ſometimes ſo forcible and ſtrong, that it not poſſible to hold a ſhip, although ſhe had 10 anckors out. It hath hapened certain years paſt, that there was loſt in the ſame haven a great many ſhips, and a great many houſes of the ſame towne waſhed away with the great water.

Betwixt Garrichica and the eaſt end off Teneriffe, are three lade place more for to lade wine at, as Maramela Relecho, and Oratama.

At the ſ. w. end of Teneriffe lieth alſo another little haven or Bay where is much wines laden called Adeſſa, there is alſo lying except it be with a ſouth-weſt winde, which bloweth there open in.

From Teneriffe to the Iland la Palma, the courſe is w. n. w. 20 leagues. On the ſ. e. ſide the Palma lieth, a faire Bay, with a town and lade-place called S. Cruz. He that commeth from the northwards, and deſireth to anckor in the road, let him run ſo far in the Bay untill he be to the ſouthwards, or paſt the head, or the bridge, and anckor there in 25 or 30 fathom. In winter time men muſt not ankor ſo near the ſtrand becauſe of the ſ. e. or ſ. ſ. e. windes, for then they ſhould lie too near the ſtrand. Men lye there morred with two ankors for the ſea winde, with a ſmall anckor out a ſtearn for to keep the ſhip right in the road, there lieth to the eaſtwards of the towne a high white rock with a croſſe, there is the beſt road. A little to the northwards of the town, is a faire ſand-bay, there is good ankoring in 26, 30, or 35 fathom according as men wil lye far off, the Road is called the Rammell road. When men lie in the road of Palma, they may ſee the Pieck of Teneriffe lie eaſt ſouth eaſt from them. The Iland Palma is very high and ful of trees, whereby it is good to be know.

On the ſouth weſt ſide of the Palma is another place, where men lade wines called Taſſa Corda.

About 5 leagues weſt from the weſt end of Teneriffe, lieth the Iland Gomera, which hath on the N. E. ſide a good haven of 10 fathom deep, where is good lying almoſt for all windes, better then in any of the other Ilands, but there is nothing to lade: Men may alſo anckor without before the haven in twenty fathom, but they muſt ſhift roads there as at Garrichica.

The road of Adeſſa in Teneriffe lieth right over againſt it, eaſt off from it about 5 leagues.

The road of Palma lieth from this haven in Gomera northweſt and by north 16 leagues.

The Iland Fero lieth from the Iland Palma ſouth and by weſt, diſtant 13 leagues.

Of the tydes.

On the Ilandes of the Canaries maketh at the moſt places the natural tyde, to wit, a ſouthweſt and northeaſt Moone the higheſt water.

Of the Courſes of the Sunne.

From the weſt point of Forteventura to the Iland of great Canaries eaſt and weſt	19 or 20 leagues.
From the north poinih of the Canaries to Punte de Nago the north eaſt point of Teneriffe w. n. w.	21 leagues.
From Punte de Nago to Garrichica weſt ſouthweſt and ſouth weſt and by weſt	8 or 9 leagues.
From Teneriffe to Ile de Palma w. n. w.	20 leagues.
From the weſt end of Teneriffe to Gomera weſt	5 leagues
From the Palma to Ferro ſouth and by weſt	13 leagues
From great Canaries to Salvages northnorthweſt	40 leagues
From Garrichica to Salvages n. n. e.	29 or 30 leagues
From Teneriffe to the Ile de Madera north	72 leagues
From great Canaries to the eaſt end of Madera n. and by w.	85 leagues
From the Palma to Madera n. and by e.	53 leagues
From Salvages to the Serters of Madera north	50 leagues
The outermoſt of the Serters lieth from Madera	4 leagues
From Madera to S. Michaels n. w.	136 leagues
From the w. end of Forteventura to the C. de Bajader ſ. ſ. w.	20 leagues
From Lancerota to the C. S. Vincent n. n. e.	165 leagues
From great Canaries to Cales northeaſt	240 leagues
From great Canaries to the C. S. Vincent, n. e. and by n.	210 leagues
From great Canaries to Roxent n. n. e. ſomewhat eaſterly	240 leagues
From great Canaries to C. de Finiſterre n. n. e. ſomewhat northerly	307 leag.
From Teneriffe to the Lizart. n. n. e. diſtant	467 leagues
From the Palma to Cape S. Vincent n. e.	224 leagues
From Madera to Cape de Geer eaſtſoutheaſt	133 leagues
From Madera to Saña eaſt	130 leagues
From Cadera to Cales e. n. e.	200 leagues
From Cadera to Roxent n. e.	173 leagues
From Cadera to the C. Finiſterre n. e. and by n. ſomewhat northerly	245 leag.

Heights.

The Iland Lancetota lieth in	28 degrees 35 minutes
The north end of the great Canaries lieth in	28 degrees
The north end of the Teneriffe in	28 degr. 40 minutes
Ile de Palma in	28 degrees 52 minutes
Salvages in	30 degrees
The ſouthermoſt part Madera in	32 degrees
But the Northermoſt in	31 degrees 30 minutes
Porto Santo in	33 degrees

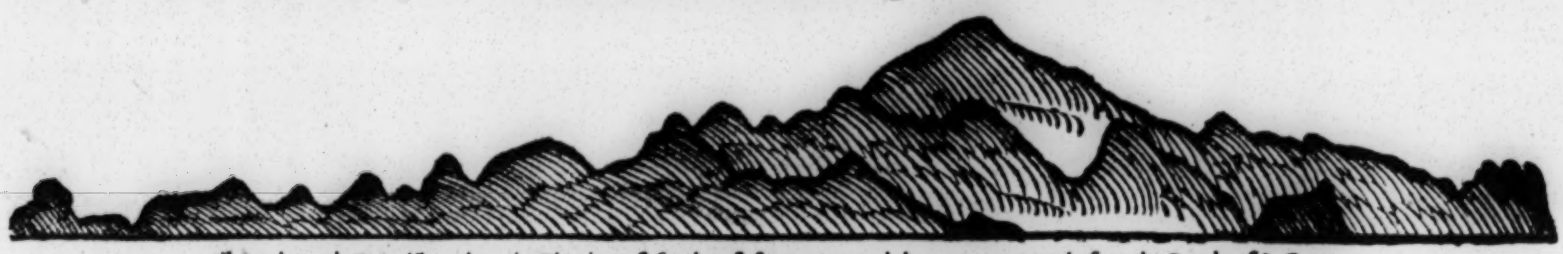
How theſe Lands doe ſhew themſelves at Sea.



Thus sheweth the south-coast of Forteventura, when the hill with the white Mizen is northwest and by north about a league from you.



Thus sheweth the northweſt ſide of great Canaries.



Thus sheweth Teneriffe, when the Pico is weſt ſouthweſt from you, and then you are open before the Roade of S. Cruz.



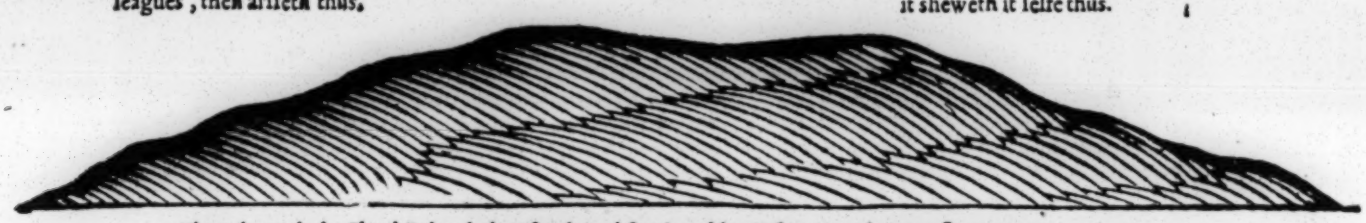
Thus sheweth Teneriffe when the Pico is ſoutheaſt from you, and then are you open before the Roade of Garrichica.



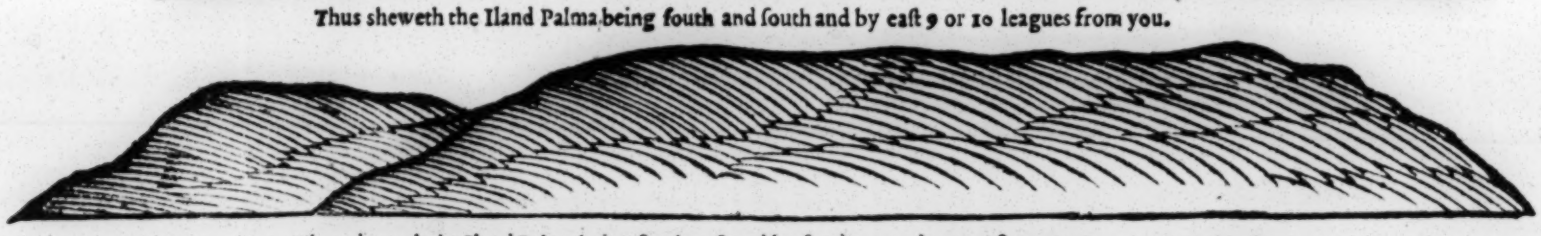
When the Palma is about eaſt from you ſixteen or ſeventeen leagues, then ariſeth thus.



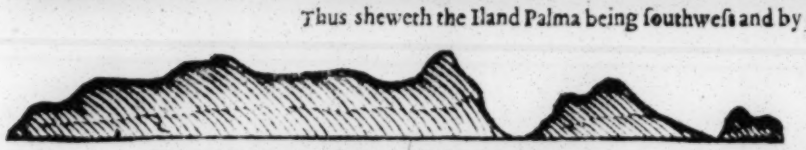
When Porto Santo is ſouth and by weſt from you about 9 leagues, then it sheweth it ſelfe thus.



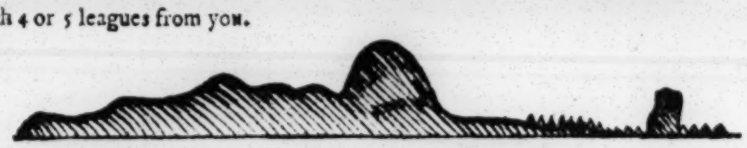
Thus sheweth the Iland Palma being ſouth and ſouth and by eaſt 9 or 10 leagues from you.



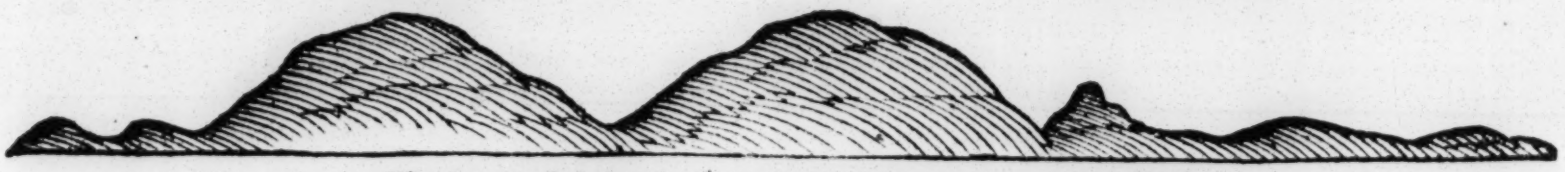
Thus sheweth the Iland Palma being ſouthweſt and by ſouth 4 or 5 leagues from you.



When Salvages is eaſt ſoutheaſt five leagues from you it ariſeth thus.



When Salvages is eaſt ſoutheaſt five leagues from you, it sheweth it ſelfe thus.



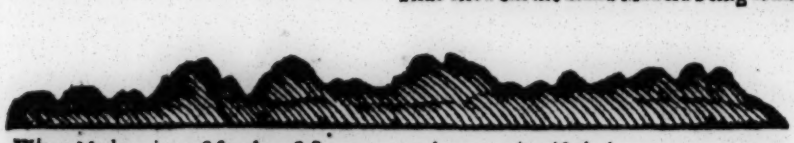
When Porto Sancto is about ſouth, 5 or 6 leagues from you, then it sheweth it ſelfe thus.



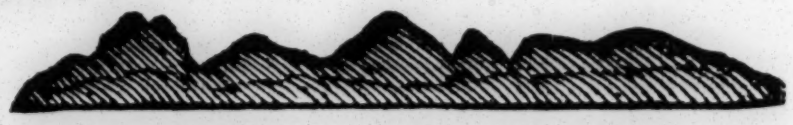
Thus sheweth the Iland Madera, When you come from the northwards, and that the middeſt of the Iland is 10 or 12 leagues from you, the ſoutheaſt end is very ragged when you are neere by it, the northweſt end is a ſteep point going ſloping downe



Thus sheweth the Iland Madera being ſouthweſt from you.



When Madera is weſtſouthweſt from you 13 leagues, it ariſeth thus.



When Madera is ſouth from you 16 leagues, it sheweth it ſelfe thus

FINIS.

The Second ~~Booke,~~ Part

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FYRIE COLOMNE,

Of the EASTERN NAVIGATION.

THE FIRST ~~PART~~ Book

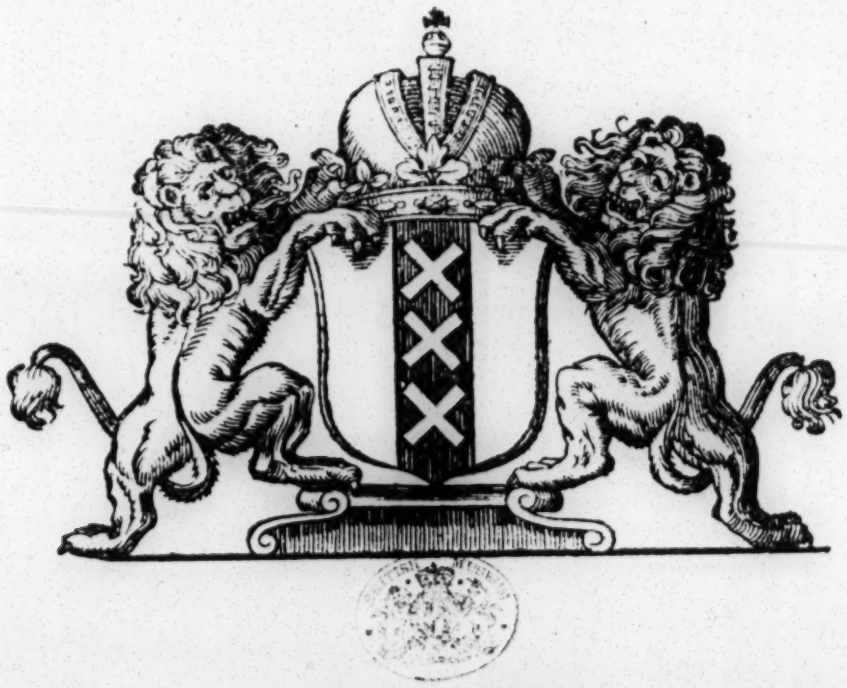
wherein the Deſcription,

Of the whole

NORTH-ZEE.

Which is ſeth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very ſerving-able for all Mariners and Pilots.



Printed at Amſterdam,

By Iacob Columne, on the Water, in the Firie Columne,
Anno M. DC. XLIX.

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London

Hull

Doggers

Antwerpen

Amsterdam

Rotterdam

Holland

NEDERLANDT

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PASCAERTE VANDE NOORD-ZEE NIEULIX WTGEGEVEN Door Iacob Colom.

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Hitlano

Feril

Duytsche mylen 15 voor een graedt

Spaensche mylen 17 ½ voor een graedt

Engelse en Fran. mylen 20 voor een graedt

't Amsterdam
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Colom op't
Water.

F R I E S

L A N D T

Texel

Vlieland

Ameland

Schiermonnikoog

Harlingen

Bolsward

Franiker

Workum

Hindeloopen

Stavoren

Enkhuizen

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PAS-CAARTE,
Vande Zuijderzee Vliestroom
Vlie . en Amelandergat .

Noorden

Emelvirt

Eus

Vrieck

Takezijl

Harlingen

Hindelopen

Stavoren

Enchuysen

Broeckersvart

Grootebroeck

Lutkebroeck

Hem

West-Vriesland.

Schellinchout

Marcken

Hoorn

Enchuysen

Wageningen

Zeeck

Ysselmonde

Dordrecht

Gorcum

Leerdam

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Oudewater

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Naerden

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Wesp

Amsterdam

Medenblick

Ysselick

Texel

Vlieland

Terschelling

Ameland

Schiermonnickoog

Delfzijl

Groningen

Dockum

Sneeck

Franeker

Leeuwarden

Bolsward

Workum

Harlingen

Sloten

Lemmer

Kampen

Deventer

Zutphen

Arnhem

Nimegen

Tiel

Bommel

Gorcum

Dordrecht

Rotterdam

Delft

Leyden

Haerlem

Amsterdam

Alkmaer

Medenblick

Enchuysen

Hoorn

Enkhuysen

Stavoren

Workum

Harlingen

Sneeck

Franeker

Leeuwarden

Dockum

Bolsward

Lemmer

Sloten

Utrecht

Amersfoort

Naerden

Muyderberch

Amsterdam

Haerlem

Leyden

Delft

Rotterdam

Dordrecht

Gorcum

Schoonhoven

Oudewater

Woerden

Utrecht

Wesp

Takezijl

Vlieland

Terschelling

Ameland

Schiermonnickoog

Delfzijl

Groningen

Emden

Leer

Aurich

Norden

Esens

Wittmund

Jever

Varel

Oldenburg

Delmenhorst

Bremen

Verden

Nienburg

Minden

Osnabrück

Münster

Coesfeld

Borken

Wesel

Emmerich

Zutphen

Deventer

Kampen

Zwolle

Meppen

Lingen

Rheine

Steinfurt

Coesfeld

Borken

Wesel

Emmerich

Arnhem

Nimegen

Tiel

Bommel

Gorcum

Dordrecht

Rotterdam

Delft

Leyden

Haerlem

Amsterdam

Alkmaer

Medenblick

Enchuysen

Hoorn

Enkhuysen

Stavoren

Workum

Harlingen

Sneeck

Franeker

Leeuwarden

Dockum

Bolsward

Lemmer

Sloten

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Delft

Rotterdam

Dordrecht

Gorcum

Schoonhoven

Oudewater

Woerden

Utrecht

Wesp

Takezijl

Vlieland

Terschelling

Ameland

Schiermonnickoog

Delfzijl

Groningen

Emden

Leer

Aurich

Norden

Esens

Wittmund

Jever

Varel

Oldenburg

Delmenhorst

Bremen

Verden

Nienburg

Minden

Osnabrück

Münster

Coesfeld

Borken

Wesel

Emmerich

Zutphen

Deventer

Kampen

Zwolle

Meppen

Lingen

Rheine

Steinfurt

La Mer Meridionale
la Fleuve du Flie.
et les Trous du flie
et d'Amelandt

BRITISH MUSEUM

The Second part of the Firie Colomne.

THE FIRST BOOKE,

Of the

EASTHERN and NORTHERN NAVIGATION.

Containg

The deſcription of the North-Zea, the coaſt of Holland, Frieſland, Halſten, Iutland, Meklenbergh, and Denemarck to Valſterboen, in the Iland of Rugen, and with all the coaſt of Norway to Dronten, as alſo the eaſtſide of England and Schotlandt.

The firſt Demonſtration,

Where in Are deſcribed the South ſea, the Vlieſtreame, the Vlie, and the channell of Ameland.

HOw men ſhall ſayle from Amſterdam to Urck (about Enchuſerſand) and from Enchuſen to the Crippel and Creyl is deſcribed in the firſt demonſtration of the firſt booke concerning the Weſtern Navagation.

Marks of the Buyes upon the Hofſtede & Cripple

The thwart markes of the buyes, both upon the Cripple and Hofſtede; are Grootebroeck and Hem two ſharp Steeples) right one in the other, and Warnis, a little ſharp ſteeple in Freeſland to the ſouth ſide of the Cliffe of Staverne, then you have the length of theſe buyes, which lye each of them in three fathom, the one on the eaſt ſhoare, and the other on the weſt ſhoare upon the tayle of the Cripple. There is in the right farewaye, two foot leſſe then five fathom, and ſoft ground. When the ſteeple of Medenblick commeth to the N. wards of the houſe of Medenblick, ſo farre as the houſe is broade, then you are cleare of Cripple ſand, and paſt it; goe then on northweſt, and northweſt and by north to the buye upon the Creyl, according as the winde and tyde ſhall be, the right farewaye there, is deep five fathom ſcarce. Thwart of the Creyl, in ſailing out, or about the Creyl, in ſailing in, that is a little within the Creyl on the north ſhoar, lyeth alongſt the reach (towards the buye upon the Hofſtede, a hard ſand or plate, called the ſouth Creyl, upon which there is no more then twelve foot water, at low water, betwixt that banck and the north ſhoare it is three fathom deepe, and ſoft ground, and to the ſouthwards, or the weſtwards of it, foure fathom and an halfe. When Mirnes, a little flat ſteeple in Freeſland, cometh over along countriehouſe to the ſouthwards of the cliffe of Staverne, then you come right thwart of that foreſayd plate.

The Kreyl.

South-Kreyl.

Markes of the Kreyl,

The markes of the buye upon the Creyl, are that ſharpe ſteeple of Twiſch over the Cornemill to the weſtward of Medenblick, and that little flat ſteeple of Mirnes to the ſouthſide or eaſt ſide of the cliffe. The right farewaye there is four fathom and an half, and five fathom deep, ſoft ground, the buye lyeth in four fathom, if need buye lyeth in foure fathom, if need require, men may runne wel a cables length about to the eaſtwards of it. From the buye upon the Creyl to the buye upon the Freeſe plate, the courſe is north and by eaſt: When the ſteeple of Twiſck commeth a little to the N. wards of Medenblick, then keepe them ſo ſtanding, ſo long as you can ſee it, and then you ſhall not faile within any ſhowldes betwixt that plate and the Creyl. Betwixt the buye upon the Creyl, and the Freeſe plate, on the weſt ſhoare, alongſt the Reach, lyeth a hard ſand, called Monickſand, which men may be foul of, if they runne ſomewhat to farre to the weſtwards.

Freeſe plate.

Monnick ſand.

When you are come about the Creyl, you may goe on north and by eaſt (with a ſhippe that draweth but little water) over the tayle of Broad-ſand, right to the buye upon the ſand, called Weſt worckum, but with ſhippes of great draughts, you muſt keep the right farewaye. For to finde the deepeſt water upon the flat: bring Pandragen, a little flat ſteeple (ſtanding to the weſtwards of Worckum) to the weſtwards of a litle village, which ſtandeth alſo to the weſtwards of Worckom, and ſayle ſo right with it, that is a good longſt marke of the buye upon the Freeſe plate, and ſo you ſhall runne right with the buy, when as that Warnes and the Mirnes come one in the other, to the northwards of Staveren, then you have the length of the buy, which lyeth on the weſt ſide of the Plate, you muſt runne alongſt to the weſtwards of it, there is the deepeſt water: when you come from the northwards, you might ſayle within the Freeſe plate on the eaſt ſhoare.

Being paſt the foreſayd buye upon the plate, goe on northnortheaſt, untill that Pandragen come betwixt the little villagie and Voorwolde. If that you have then the cliffe through Staveren, then you have the deepeſt water upon the ſhowldeſt of the flatte, then men runne commonly a little more northerly unto the buye in the Bight, and alongſt to the weſtwards of it, which lyeth right in the farewaye in ſixteen foot, but alongſt to the eaſtwards of the buye is the deepeſt water, the farther into the Bight towards Freeſland the deeper. The marke of this buye, is the little flatte ſteeple of Mirnes on to the ſouthwards of Molqueren. Bring that foreſayd little flat ſteeple in Molqueren, and keepe it ſo ſtanding, and then you come in the farewaye of the buye of Weſt-worckum, that is a very good marke, when the buyes are taken away.

Buye in Bight.

The old thwart markes of the buye in the Bight, are Mirnes, Molqueren, Hemelum, and a little long village, when they ſtand in four parts. Betwixt the buyes upon the Freeſe plate, and in the Bight is the ſhowldeſt of the flatte. When the buye in the Bight is on your broad ſide, then go on north and by weſt, ſomewhat more weſterley, unto the buye of Weſt-worckum, which lyeth on the eaſt ſhoare in ſixteen foot at low water, upon theſe marcks: a little ſharpe ſteeple, far within the land called Harich, commeth over a little village, to the northwards of Hinlopen, called Dertwiſch, the right deep thwart of it is three fathom. The old markes are two villages next to Mackum, upon the water ſide, ſtanding N. E. off from it, when theſe ſtand a little aſunder, one from the other, you ſee yet two little ſteeples ſomewhat to the northwards of Bolſwaert, almoſt one to the other, neare about as the other upon the water ſide ſtand aſunder; the one is called Idſegahuyſen. The thwart markes are a high houſe on the eaſt end of Coudom, that commeth within a capſtone barres length to the ſouth end of Hinlopen. From thence to the buye upon Yghelhoeck, the courſe is north, the markes there of are, a little ſharpe ſteeple with the firſt long village to the northwards of Worckum, called Geeſt, when that little ſteeple commeth in the innermoſt ſwampe of that long village, then you have the buye, that is a good thwart: the longſt marks are, the ſharpe ſteeple of Pingom over the flat ſteeple of Coorenwaert upon the water-ſide, and Pandragen to a little houſe to the northwards of the villagie with the ſwamp, or when the mil of Staveren ſtandeth betwixt the towne and the Blockhuyſe of Stavern, theſe are all good longſt markes of the buye upon Yghelhoeck.

Buye of VVeſt-worckum.

Iglehoeck

From Yghelhoeck to the middle ground the courſe is north, the right deepe in the Middle ground is 7 fathom in the fareway betwixt Weſt-Worckum and Yghelhoeck the right deep is four fathom, ſoft ground, the eaſt ſhore is flat and the weſt ſhore ſteep. The buye of the Middleground lyeth upon theſe marks: the two ſharpe ſteeples Arum and Pingom one in the other about northeaſt from you: or Bolſwert right to the northward of a Countrie houſe, to the northwards of Mackum, theſe are good thwart marcks of the Middle ground. The longſt markes are: Kinſwart, (that is the runner) cometh behind the Church of Surich, then you are right in the farewaye. The Church of Surigh ſtandeth upon the water ſide, upon a pointe that lyeth out about to the northeaſt and by north from the buye, or when the flat ſteeple of Wynaem (to the northwards of Harlinge) commeth betwixt Midlum & the eaſt end of Harlingen, then you are right in the Middleground, on which ſide that Wynaem ſtandeth neareſt unto, the weſt ſhore is ſteep; the eaſt ſhore indifferent flat, you may run

Middle ground.

over it in three fathom, and come againe in five fathom towards Frieſland. From the Middle-ground outwards to the Flye, you can ſail within no tailes of ſand on the weſt ſhore.

Swanebalgh. Being paſt the buye in the Middle-ground, then goe on northnorthweſt unto the buye upon Swanebalgh, which lyeth in three fathom on the eaſt ſhore, the thwart marcks there of are Bolſwaert over a little ſhort houſe to the ſouthwards of Cornwaert. When you runne over betwixt the buyes of the Middle-ground and Swanebalgh on the eaſt ſhore more eaſterly then in three fathom, that you come againe in four or five fathom, you might (in ſayling out) ſail behind the ſhoulds of Swane-balgh, or when you are bound in behinde the ſhowlds of the Middle-ground, the weſt ſhoare thwart of this, you may ſound in four fathom, or three and a half, over againſt the buye upon Swane-balgh, on the weſt ſhore is good ground for to ankor in.

Schuyte-ſand. From the Buy upon Swanebalgh to the Buy upon Schuyteſand the courſe is N.W. ſomewhat northerly: the thwart markes there of are Wynaem over the heigheſt part of Harlingen: the longſt markes are, Bolſwaert the northwards of the Sluys, which lyeth to the northwards of Woens, this buye lyeth in 6 fathom on the eaſt ſhoare, upon a taile or point, which you might ſaile within when you ſayle out, the right deep thwart of it is 7 and 8 fathom, the weſt ſhore is indifferent flat, which you may ſound indifferent flat, which you may ſounde in 4 fathom, the eaſt ſhore is ſteepe, but a little without the buye is flat all alongſt to Keeshoeck, and you may ſound it all alongſt unto the Sloot. In ſayling up, you might ſayl within the weſt ſhore over againſt Schuytſand, or a little to the ſouthwards of it in 3 fathom, or 3 and a half into Deadbalgh, behind a tayle of ſand, called the point of the Waert, but keeping in 4 fathom from that ſhoare, you can not take hurt of it. In ſailing up with a forfloud, keep the eaſt ſhore, or els you ſhould be lightly carried there with into the foreſayd balgh, behind the Waert, before you ſhould be aware of it. Upon the poynt of that waert ſtandeth a drift beacon, and 2 to the northwards or the weſtwards of it, which men doe call the beacons of Claeſoomen, and to the ſouthwards of it ſtandeth a beacon upon Dominicus plate, or, (as the Pilots do name it) Meynſen plate. The marcks for to ſail alongſt this long reach are: Mackum with a mill upon the water ſide, and a village with a little flat ſteeple to the ſouthwards of Mackum, called Idſegahuyſen, when Pandragen commeth betwixt Mackum and that village then you ſhall go cleare of that foreſayd taile or Deadbalg: If Pandragen come neareſt to Idſegahuyſen, then you are to near the foreſaid tayle or plate, or if pandragen come neareſt to Mackum, then you are to neare the eaſt ſhore.

Poynt of waert.

From Schuytſand to the buye upon Keeshoeck, the courſe is weſtnorthweſt, or northweſt and by weſt according as the wind and tydes ſhall be. In that long reach goe litle more then half tides alongſt the deep, the afterfloud and fore-eb fall thwart over there to the weſtwards, and the after-eb and foreflood right contrarie to the eaſtwards. The marks of the buy upon Keeshoeck, are Franiker ſteeple betwixt the mille and the towne of Harlingen, or to the maſtes of the Shippes which lye in the haven.

Keeshoec.

This buye lyeth on the eaſt ſhore, the right farewaye thwart of it is eight, nine and ten fathom deep.

Betwixt Keeshoeck and Schuyteſand, or betwixt the beakons of Klaeſoomen and the poynt of the water lyeth a little narrowe plate alongſt the reach, allmoſt in the middeſt of the farewaie neareſt to the weſt ſhoare, whereupon it is not deeper then four fathom, or three fathom and an halfe, when men turne to windewards the yare over it with two or three caſts of lead.

Old Flye. Weſtwards from the buye upon Keeshoeck lyeth the Old-Flie, it lyeth in firſt ſouthſouthweſt, and then forth to the buye upon the Neſſe, in the Teſſel ſtream. The after floud with the fore-ebb fall in very ſtrong into this channell. In ſayling upwards you might ſayl within it in four fathom. The marks of it are, the ſteeple of Franiker right to the ſouthwards of the ſteeple of Harlingen. From thence outwards off unto Schieringshals the weſt ſhoare is very ſteep, in eight fathom you ſhall be cloſe by the ſhoare. The fareway betwixt theſe buyes, and thwart of the buye upon the Elbowe is tenne and eleven fathom deep.

Wolfs-hoeck. From Keeshoeck to Wolfshoeck the courſe is firſt northweſt and northweſt and by north unto the buye betwixt them both, by ſome called the Schor tun and by the Pilots the buye upon the Ellebowe: and from thence to the buye upon Wolfshoeck, north, or ſomewhat more eaſterly, which lyeth in four fathom on the eaſt ſhore.

Schor tun or the buy upon the Elbow.

From the buye upon Wolfshoeck unto the buye unto Schieringshals the courſe is northnorthweſt, and northweſt and by north according as the winde ſhall be. To the northwards or to the eaſtwards of the buye upon Wolfshoeck goeth up a broade bight ſoutheaſt farre into the grounds, ſo deep as the right farewaye, called the Inſchot, comming in you might ſayle within in ſeven fathom, the forefloud falleth from Schieringshals very ſtrong into it, and the fore-ebbe to the contrarie, very ſtrong out of it upon the taile of Schierings hals, whereby many ſtips are miſcarried.

Schieringshals. The In-ſchot.

Schieringshals is a tail of ſand, which ſhooteth off from the weſt ſhore, upon it lyeth a white buye in three or four fathome, comming in from without, men might ſayle within it in ſixe fathom, the right deep betwixt Wolfshoeck and Schieringshals is nine fathom.

Longſand. From Schieringſhals to Longſand, the courſe is northweſt, and northweſt and by north, betwixt them both on the weſt ſhoare it is ſhallow water, and the beſt roade of al the Flye ſtreame, there goeth alſo little tyde. The right deepe is eight, nine and ten fathom, Longſand men might ſayl within it on the eaſt ſhoare, in ſayling up, but if they keep themſelves in ſeven or eight fathom, they ſhall not come to neare neither of Longeſand nor Schieringſhals. When the eaſtermoſt houſe upon Grindt commeth a little to the northwards of the weſtermoſt, then you have the length of the buye upon Longſand. From Longſand to the Sloot the courſe is forth northnorthweſt, the right deepe is tenne fathom, or men run alongſt by the beakons upon Crakeſand untill they come into the Sloot.

Monck-ſloot.

The Iland Flieland is three leagues long, and a land very good to be known: upon the eaſt end lye high white ſand hilles, and to the weſtwards it is a land ful of ſhort low hommocks or nobbes. Upon the weſt end ſtandeth a Church with a mill to the eaſtwards of it. From the weſt end ſhooteth off a riffe a good wayes into ſea. To the weſtwards of this riffe, betwixt Flieland and the Eyerland goeth in a deep, called the Weſtergatte, or Weſtfiel deepe, which is not for great ſhips, but onely for Fiſher boates, there is not above eight or ten foot water. Upon the eaſt end ſtandeth a mill with a cape, the which are markes for to avoid the ground, which lye before the Flye.

The eaſt end of Flieland, and the weſt end of Teſſel lye eight leagues aſunder.

To the eaſtwards of the Flyeland lyeth the Schellingh, which is about three leagues long. Upon it ſtand four churches, with one chappell, the weſtermoſt is a high flat ſteeple called Brandaris. About the middeſt of the Iland ſtand two ſteeples, the weſtermoſt is flatte, called Zeerip: the eaſtermoſt is ſharp, and is called Midlands. To the eaſtward ſtands a high ſharp ſteeple called the Horn, and chappell called Saint Iohns. Upon the eaſt end lye high white ſandhills, and upon the weſt end lyeth but one, called the Lit, betwixt midlans and the Lit it is low Nubby land. Upon the weſt end ſtandeth a cape with a Fire-beakon, where on there is fired by night.

Stortemelck.

For to ſayle into Stortemelck (that is the Land-deepe of Flieland) you muſt bring the Cape upon the eaſt end of Flyland, and the mill one in the other, which ſhall ſtand then from you ſoutheaſt and by eaſt, or a little more eaſterly, ſayl right in with them, and you ſhall fall right with the outermoſt buye, which lyeth in five fathom upon the outermoſt poynt of the long banck, which banck is on the north ſide indifferent flat, ſo that when you come from the north, you may run alongſt by it upon your lead in five or ſixe fathom, and ſo alſo find the foreſayd outermuſt buye. You may alſo (for need) run alongſt ſomewhat to the eaſtwards of the outermoſt buye, over the end of the long banck in three fathom; or 16 foot towards the ſhoare, but not to the eaſtwards of the ſecond buye, but a good wayes alongſt to the weſtwards of it, which lyeth even the ſouthwards of a poynt of another narrow tayle of ſand, upon which thwart of the buye is but eleven foote water, betwixt that tayle and the long banck runneth a creek to the eaſtwards into the grounds, of five fathom depth. It happeneth ſometimes that the ſhippes that come over the end of the long banck, and finding again deeper water, thinck that they are in the right deep of Stortemelck, and luffe up into it, but they run into the foreſayd ſhoare or creeke, in betwixt the two tayls of ſands, not without a great danger with a weſterly winde, where they muſt go out back againe. Comming from the weſtwards alongſt by Flie-land in foure or five fathom, you ſhall not alſo ſayle to run in ſight of the foreſayd outermoſt buye. He that falleth about Stortemelck by night,

let

let him bring the fire-beakon southeast and by east from him, and run in so right it untill hee come by the shoare, and he shall run alongst to the westwards of the outermost buye. In Stortemelck lye 7 black buyes, and one white buye, in sayling in you must leave al the black buyes on the larboardside, & run alongst to the southwards of them: and the white buyes on the starboard side, likeas al other white buyes as well in the Boomsgat, the Jetting, as upon the Flye-streame. The second buy called the outermost Droge dry, lyeth in 11 foot upon the showldest of the channell, to the southwards of it also is no more ten eleven foot water, but a little within, it is againe sixteen foot deep. The third is called the innermost Droghe dry, which lyeth in sixteen foot, the right deep betwixt them both is 3 fathom. The fourth is called Heyck hoock, betwixt this it is in the fareway five fathom deep over against the fourth lyeth the white buye at the strand, thwart of it runneth of a little tail from the shore, which (in sayling out) you might saile within it. Upon this white buye, or unto the fourth buye from without, it lyeth in eastnortheast, from the fourth to the fifth about east, and then more and more southerly. The first buye, is called the outermost poynt buye, the sixth the middlemost poynt buye, and the seventh or last the innermost poynt buye.

Betwixt the outermost and the middlemost poynt buye, neareste to the outermost, runneth off a taile of sand from the shore, which men might saile within when they come in, which groweth out sometimes as a farre as the buye, and then the Deepe breaketh through again by the shoare, and scoureth away the taile altogether to the north side. From the innermost buye you must run in to all alongst by the strand of Flye-land, or on southwards the buye upon the Plate.

Booms gat.

For to sail in at the Boomkens-gat comming out of the sea, or from the westwards: bring the Cape upon the Schelling and the steeple of Brandaris one in the other, which shall then stand from you, south and south by east, run then right in with them, and you shall find the outermost buye without, the channell in these in 5 and 5½ fathom, a little without, and to the eastwards of the outermost poynt of the steepe ground, which are without upon the north side so steepe, that you shall be in twelve fathom very close to them, whereupon remaineth no more then five foot water. Close to the westwards of the foresaid Cape standeth a Fire-beacon, whereupon is fired every night.

Comming by night out of the east, you must have a care of the turning of the water about the wall, and runne along thereby upon 3 fathom, untill the fire is thwart from you, and so along upon 3 fathom unto Fey-hook, then is the fire about east and east somewhat northerly from you, where you get deeper water. You may runne upon 4 fathom without round about the shore grounds. The easter Beams-gatte is not well to sayle in for one that is not acquainted there, because there are so many Irre-grounds as by Oesel. The fore-floud falled there eastnortheast thwart over this hole, almost untill halfe floud, before it goet rigt inward; unto the contrary, the fore-ebbe falleth also westsouthwest thwart over the hole, almost untill halfe ebbe, before the same falleth right out, therefore is it beft with an northeast or easterly wind and fore-ebbe, to go on a good way by east the Cape and tower of the east wall, and runne along thereby upon 3 fathom, (being wholy cleane and flat) untill you are within the Cape and tower. The second Buy lyeth within the utmost poynt of the shore-grounds, distant from the first about southwest and by west, the shore grounds are on the end so steep, that is close thereby 18 foot deep, the east-wall is in going up very flat and begins to be dry from 18 upon 16, 14, and 12 foote. By east the second buye, is the farewater 3 fathom deep, there by west is it 5 fathom, but not vvide, therefore you may not runne there farre along by vvest, becavse vvith a fore-ebbe you should come easily against the shorre-grounds, vvhich are on in-side very steep. You may runne on the east vvall upon the lead, so close by the same as you please, though vvith a storme the Sea doth burne and breake thereupon untill the 2 Buye. The second, third, fourth, and fifth buyes doe lye all upon a self-same distance from each other, to vvit, southvvest and northeast, the third on the east-vvall, though you may runne thereby beyond east, the east-vvall there besides is very flat, and the fare-vvater by vvest the Buye seven fathom deep. The fifth (called the Buye upon Fey-hooke) lyeth also on the east-wall, (though somewhat nearer then the third) upon 5 fathom, men may sayle there along by east but not farre the farewater there by west is 7, 8, and 9 fathom deep. You may sayle in upon the lead (till you are past this buy) along by the east-wal, also by night or darke weather you need not to be afraid of any danger, for there within is it wide and broad. From Bey-hooke you goe unto Robbe-gat. On the north side of the Robbegat, upon the top of the drye Plate, standeth a beacon in the midst of the Robbe-gat, next unto the drye Plate, lyeth a small dry place, upon which before in the comming in there lyeth a buye, betwixt the same buye or the small drye place and the foresayd Beacon is the deepest water, but you must runne in close by the Beacon, for not to be mis lead with the streame, which doth fall there thwart over the drye Plate, beneath and betwixt the small drye place, and the Rosin-plate, is it wider, and the Robbegat stretcheth southwest and southwest and by west in. Being through the Robbegat, there runneth the straud of Vlieland, where you may passe along close by.

Wester Beams-gat.

For to sayle into Wester-Beams-gat, or hole comming out of the west, bring the Cape &, steeple of Brandaris over against another, which is then east and east & by south from you, runne thereupon, and you shall finde the utmost buye; there is 6 fathom water, keepe the Cape and Steeple so standing untill you come by the second buye, bring then the Steeple a great hand-spikes length by south the Cape, and saile thereupon, then you shall passe along betwixt a black and white buye, there is upon the dryest place 17 foot with low water, from thence you come unto 6 and 7 fathom, and so forth in the right Beams-gat, on the north wall it is deepest water being wide and broad, so that a man well could loose up into this hole, the Streame runneth there right in, although it be still weather.

The Ietting.

For to saile into the Ietting, comming through the Robbegat, beyond the Rosin-Plate, you may runne unto the Buye upon Langesand, and so forth along betwixt the white and black buyes, leaving (in sailing up) the black on the larboard, and the white on the starboard, untill you come against the Beacons upon the Nakens, then you may plainly see from the one buye unto the other, sayle then so forth along, by the Beacons upon the Nakens, east southeast on, untill Brandaris come close by Grind, (but not thereon) hold it then so standing, and runne southward on, you shall sayle then just upon the taile of Hendrick t Iaerts Plate, which you may undersaile on the east-side; Leave the same on larboard, and runne there by west along southsoutheast unto the last buye, which lyeth upon the southpoynt of the foresayd Hendrick t Iaerts Plate. Over against the Beacons upon the Nakens, on the south-wall lye two white buye, the eastermost upon a taile, which in sailing off, you may undersayle. There by south, betwixt the two last black buyes by the west wall, is the Road where the Shipps (going unto Harlingen) doe set, for to unlade themselves.

NOTA.

All dephts, as heere before is described, as well of Stortemilke as of Boomkens gat, is sayd to be of the lowest water; with halfe floud it is 3 foot deeper, it floweth upon the foresayd places with halfe floud it is 3 foot deeper, it floweth upon the foresayd places with a common tyde six and an halfe or 6 foote up and downe. The number of the dephts in the Mappe of the flie and Amelander-gat, are to be under stood of so many foote as the number is, as by example: by the utmost bay of Boomkens-gat stands 66 which is 66 foote, or eleven fathom, that is 6 foot for one fathom.

Ameland-gat.

Two leagues to the eastwards of Schelling lyeth Ameland, lying E. N. E. and W. S. W. foure great leagues. Upon the W. end of Ameland standeth a Cape, and a great thick flat steeple, called the Hoelme, the roofe of this Church is broken off, but the after fronte with the roofe standeth above the side walls, to the eastwards of the Church of Hoelm standeth a mil, with a house to the westwards of the mill, also a broad flat towre. About the place whe Midlandchurch was wont to stand, lye three or foure vvhite sandhilles, vvhich are lovv, flat, and long, tovvards the east end it is nobbie land, vvith vvhite amongst it. From the vvest end of Ameland runneth off a riff, almost three leagues into sea, called Born-rif, vvhich is upon the outer side verie steepe: come no nearer it then in 12 fathom, comming from the eastvvards you cannot saile vvithin it, but in sayling alongst by it in seven fathom, you shall not run a bovvles cast along vvithout it. Bornriffe.

For to sayle into Ameland-gat, comming out of the sea, bring the cape upon the east end of the Schelling, right over the steeple of Horne, vvhich shall then stand from you S.S.W. or a little more vvesterly, sayle in right vvith them, untill that the cape upon Ameland, and the steeple of Hoelme are one over the other, then leave the first markes, and sayle in upon

the

the ſecond, and you ſhall finde the outermoſt buye, vvhich lye ſomevvhat vvithin the outermoſt poynt of Bornriff. Comming from the vveſtvvards, run alongſt by the ſtrand of the Schelling in five, or ſixe fathom and an halfe at lovv vvater, and you ſhall not fail to ſayle right upon the outermoſt buye, and then the Cape and ſteeple upon Ameland ſhall alſo come one over the other, and ſtand from you eaſt, or a little more ſoutherly. Comming alongſt by the Schelling in four fathome, you ſhal not ſayle vvithin the Koggedeeps ground, over againſt then lyeth the firſt buye on the ſouth ſide of Bornerif, run alongſt to the ſouthvvards of it, keeping the cape and ſteeple one over the other, untill you be paſt the ſecond buye, vvhich lyeth thvvart of the vveſt end of Kamperſand, the farevvaye betvvixt theſe tvvo buyes is five and ſixe fathome deep.

Kogdeep Grounds.

Kamperſand.

Being paſt the ſecond buye, bring the ſteeple ſomewhat to the northwards of the Cape, and goe on eaſtnortheaſt towards the third buye upon Gerritſhonden, for to avoyde the plate which lyeth off from the ſouthſide, towards Born-riff, on it lye two white buyes, the firſt over againſt the a foreſayd third black buye, the other over againſt the fourth black buye, lying from the third about ſoutheaſt; leave the black buyes all on the larboard ſide, and the white on the ſtarboard ſide, and run through ſo betwixt them both, the plate is, on the north ſide indifferet flat, ſo that you may run to it upon the lead, reckon wel your tydes, eſpecially be carefull of a fore-ebbe, which falleth very ſtrong over that channell northnorthweſt into ſea over Born-riffe. Betwixt the ſecond and third buye in the fareway it is eight and nine fathom. Betwixt the third and the foreſayd plate ſeven fathom. Being paſt the fourth buye, both ſides are very ſteepe, and the fareway 8, 9, 10, and 12 fathom deepe, goe then in ſouthſoutheaſt, untill that the ſteeple of Holm com over the ſouth poynt of Ameland where the boats lye, and then you come in the bight, where it is on the ſouthſide flat, and good anckoring in five or ſix fathom, the north ſhoare is very ſteepe.

Gerritshonden.

For to ſayle further into Horſen, go away from the bight eaſtnortheaſt alongſt by the ſouth ſide in five or ſix fathom, ſo long untill Heynooms chamber (being a red tyled houſe) come a handſpikes length to the northwards, or to the eaſtwards of Hoelm-church, anckor there in 5 or 6 fathom, you ſhall lye there in good ground, and ſheltred for al winds, alſo there goeth little tyde; in this farevvay it is 12 fathom deep, the north ſhore is there very ſteepe. Theſe foreſayd depth (like as alſo thoſe of the Flye) are ſayd of lovv vvater.

Off the tydes.

At Amſterdam a northeaſt and ſouthweſt moone maketh the higheſt water.

At Horne, Enckhuyſen, and at Urck, a north and ſouth moone.

Betwixt Cripple-ſand, and the Creyl, a north and by weſt and ſouth and by eaſt Moone.

Upon the Frieze and Wieringer flat, a northweſt and ſoutheaſt moone.

In the Flye and Ameland-gat a ſoutheaſt and northweſt moon maketh high water. Before the flye the flood falleth to the e. wards thwart over the grounds, almoſt untill halfe flood, before it ſetteth in the Bootmkens-gat. Likewiſe the Ebbe to the contrary falleth to the weſtwards thwart over the grounds, almoſt untill half Eb, before it ſetteth right out at the channell. The afterflood turneth about with the fore ebbe and fall alongſt Flyeland out a Stortemelck, but the foreflood runneth right into Stortemelck.

Of the depth about theſe places, and in what depths men may ſee the lands.

The Ilands Flyeland, the Schelling, and Teſſell, men may ſee in 15 and 16 fatom. Thwart of the Schelling the ground is white ſand.

The ſteep grounds or Peterſand and Born-riſſe, are very ſteepe on the off ſide, cloſe by them it is 12 or 13 fathom deepe.

Ameland men may ſee in twelfe fathom, the depth of 13 and 14 fathom runneth far of to ſeawards, ſo that men cannot ſee it in 15 fathom.

Courſes and Diſtances.

Peter-ſand, or the ſteepe grounds and Born riffe, lye northeaſt and by eaſt, and ſouthweſt and by weſt — 4 leagues a ſunder.
From the Flye to the northeaſt end of the Broad-fourteens, the courſe is weſtnorthweſt — 8 leagues
From the Flye to Tinmouth or Newcaſtle, weſtnorthweſt — 90 leagues
From the Flye to Hitland, the courſe is northweſt, and by north, ſomewhat northerly — 152 leagues
From the Flye to Faire hill, northweſt and by north about — 144 leagues
From the Flye to Scuytenes, the courſe is north and by weſt, ſomewhat northerly — 106 leagues
From the Flye to the Naes, north and by eaſt about — 85 leagues
From the Flye unto the Riffe in 16 fathom north and by eaſt 63 or 64 leagues
From Flye to Boevenbergen, the courſe is northnortheaſt or a little more eaſterly about — 69 leagues
From the Flye to Rinkopper, or Numer-deep, northnortheaſt, or a little more eaſterly about — 58 leagues
From the Flye to the Iland Silt, on the coaſt of Iutland, the courſe is northeaſt — 46 leagues
From Born-riffe to the Naes, the courſe is N. a little more eaſterly 81 leag.
From Born-riffe to Holy Land northeaſt and by eaſt — 33 leagues
From Born-riffe to Wranger-oogh, Eaſt-north-eaſt — 29 leagues
From Born-riffe to the VVeſter-Kems — 14 leagues

How theſe Lands doe ſhew themſelves at Sea.

Thus ſheweth Flyeland when you are two leagues thwart off from it.

Thus sheweth the Schelling when you ſail alongſt by it about two leagues from the Land.

Ameland sheweth it ſelf thus, when you are two leagues thwart off from it.

The ſecond Demonſtration,

Wherein the Scholbalgh, Lauwers, both the Eemſes, the Weſer, the Elve, and the Eyder, and other channels of the Sea betweene them.

Schiermonck-oogh.

SChiermonck-oogh lyeth from the eaſtend of Ameland eaſt ſomewhat northerly 2 leagues, it is a little low plaine Iland, about 2 leagues long, there ſtandeth no ſpeciall thing upon it to be knowne, but upon the Weſt end two capes, with a withe ſandhill, otherwiſe it is all with lowe blackiſh ſandhils, or hommocks, (but higher then upon the eaſt end) and mingled with white: the eaſtend is a long flat ſtrand, with little low rough ſandhills. When you bring the two capes upon the weſt end one in the other, and runne ſo in, you ſhall finde the outermoſt buye, which lyeth without the channell, at ſea, in 7 fathom, or there abouts. Sometimes there lye two and ſometimes three buyes in the channell, which you muſt leave on the ſtarboard-ſide, and runne alongſt to the eaſtwards of them, being come within the channell, you ſhall find alſo beacons on the W. ſhore, which you muſt follow all along, untill you come to Oſtmerhorn, where you may anckor. The lying in, and depths of that channell doe alter and ſhift oftentimes, and ſometimes much within a ſhor time, ſo that there is no certainty to bewritten of it, whereunto men might truſt.

Rottum.

Foure leagues to the eaſtward of Schiermonckoogh, lyeth the Iland Rottum, and betwixt them the little Iland the Boſch. A few yeares paſt through, ſetting of ſpyrie graſſe or heath, there was grown two or three handſome ſandhils, but are now againe altogether blowne away, & altered into a plaine ſtrande, which the ſea at high flouds doth altogether runne over.

Betwixt theſe Ilands the Boſch and Shiermonickoogh was wonte a channell to go in of indifferent depth, called the Lawers, which is now moſt caſt to, by the foreſaid ſtrand of the Boſch, which is grown in al alongſt unto the oogh, ſo that there is no more remaining, them a narrow and ſhowld creek.

To the eaſtwards of the Boſch goeth in the Schille, alſo an altering and uncertain channell, which is ſometimes deepe, and ſometimes againe ſhowld, and the channel ſhifteth too and againe, ſo that there is no certainite to bewritten of it, whereunto men might truſt.

The Old or Weſter Eemſes.

When you ſet the Capes upon Rottum over againſt another, the ſame ſhall ſtand the ſoutheaſt ſomewhat ſoutherly comming out of the ſea, ſayl ther freely upon, you ſhall find then the utmoſt buye, and you may ſee then the Steeple of Backum E. ſomewhat ſoutherly from you, and the weſt-end of Rottum ſoutheaſt, and by ſouth, and lyeth upon the taile of the many-Bags-Plate, being a white buy, with a little wind, upon the top, lying upon ſix fathom with low water, being marked in the mappe with the letter A from the firſt buye unto the ſecond, is the courſe ſoutheaſt and by ſouth, marked with the letter B, that is the firſt black buye, upon 7 fathom on the ſouth wal, leave this buy, in ſailing in, on ſtarboard, and the white buye on the larboard then you have the ſteeple of Borckum from this foreſayd black buye, eaſt, and the Capes upon Rottum, ſoutheaſt ſomewhat eaſterly from you. From the firſt black buye unto the ſecond, third and fourth buye, with the letter C. D. E. is the courſe eaſt and by ſouth. Comming out of the weſt next unto the Lauwers or Boſſand, hold it off from the ſhore upon five fathom, till you are paſt thereby, ſaile then freely eaſt on, and

Mony Bags-Plate

Paſcaerte vande Weſter en Ooſter Eemſen. De Weſter. Elve, De Eyder met de ander Seegaten tuſſchen Amelandt en de Eyder.

TOT AMSTERDAM,
By Iacob Aertſz. Colom.

Dutſche mijlen 15 in een graadt. Lieues d'Allemagne 15 en un degre

Engelſche en Franſche mijlen 20 in een graadt Lieues Anglez Franc. 20 en un deg

Spaenſche mijlen 17½ in een graadt. Lieues d'Eſpaigne 17½ en un degre

Namen ſommigher plaetſen op beyde de Eemſen met letters aengheteeckent.

a Gelſaten plaet
b De nieuwe Steert
c De Wolden
d Borkumer balgh
e De Ruyſil
f Steven Ianſzens tou
h Brouwers plaet
i Memer Sandt
k 't Dieps op de hoge Hora
l Memer balgh
m Tou op Commix plaet
n Tou op Hamburgher Sandt

Namen ſommigher plaetſen op de Scholbalch, Lauwers ende Schille.

a 't Hoogh Sandt
b De Peerdemarckt
c De Ruychelbalgh
d Synxens Sandt
e Boſſandt
f Sandten voor Roltum die na den Boſch ſtrecken

Op de Eyder.

a De oyterſte Eyder tou
b Tou op de Hondt
c Boeien op de Hondt
d Vooren Hendrick
e e e Boeyens op den Vooren Hendrick
g De yſſer na de Elve
h Vlackmer Sandt
i Eylandtſche Buytenſanden
k Boeien op de Vlack

Op de Iaa en Weſer.

a De Stenebalgh
b Boeyens voor 't Wadt
c Amtens of Iappe plaet
d De Iaa tou
e Tou op 't Hoogh
f Tou op 't Crooy
g Abelen tou
h Tou op Bollenſyl
i Boeyens op Bollenſyl
k Eerſte tou op 't Vlack
l Het Vlack
m Coppenhaues Sandt

KEY DINGER LANDT

Buiſe Oſtfriſland

Witte grunden

Noorder grunden

Reymerſdr Sandt

Roode Sandt

Tiriel

Ameland

Schiermonnickoogh

Terſchelling

Vlieland

Texel

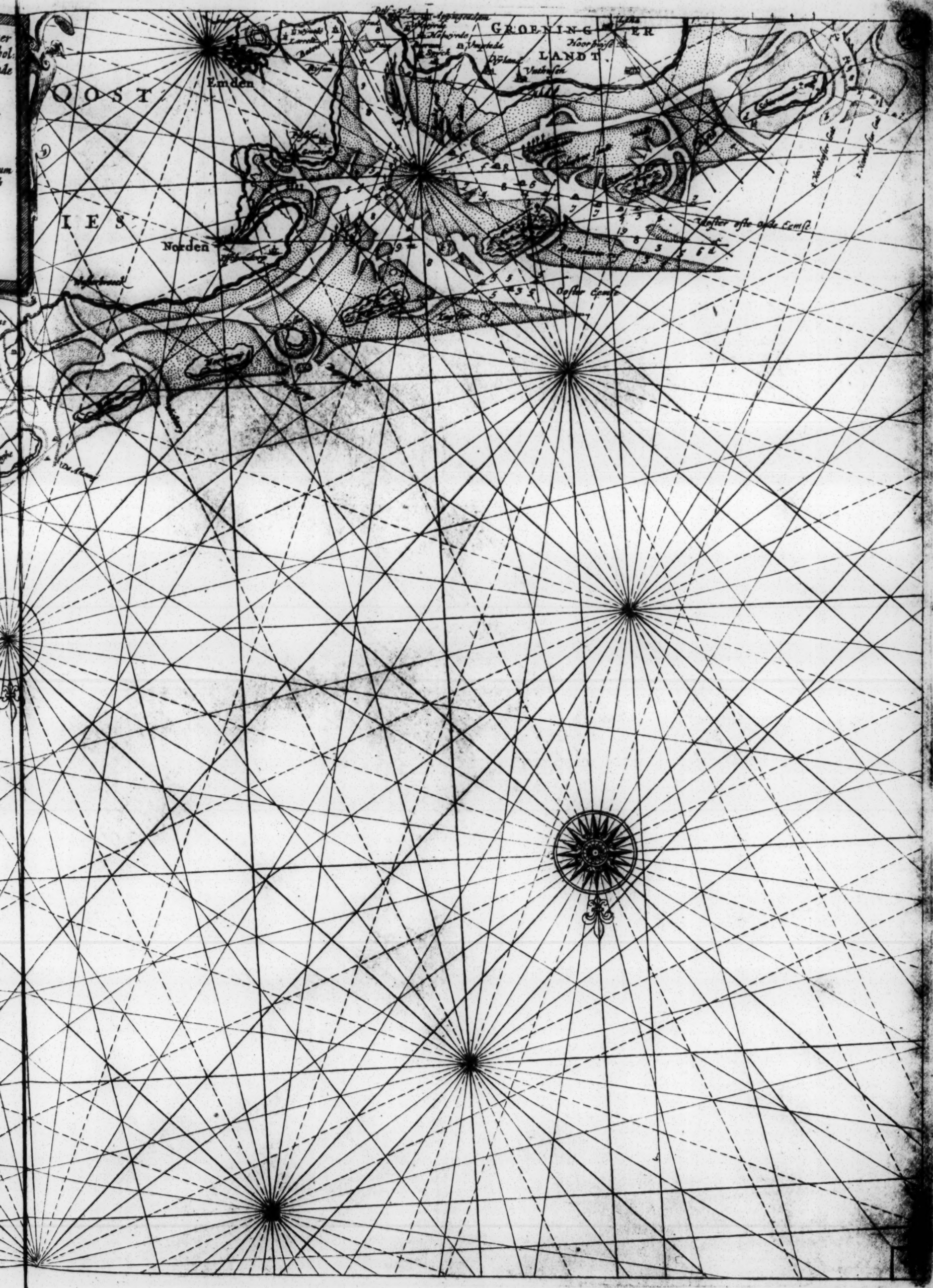
Wadt

Oſt

Hoghe Landt

EYDERSTEDT

Tonningen


GROENINGER
LANDT
OOST
IES
Emden
Norden
Oosterems
Oosterems

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11 JUL 62
MUSEUM

and you ſhall runne within through Gelt-ſack-plate upon 5, 4, and 3 fathom, afterwards upon 8 fathom, then you ſhall come by the fourth black buye, which doth lye upon 4 fathom.

Borckummer-Riffe. The Borckummer-Riffe is on the out-ſide, and flat upon the end. When the Capes upon Rottum doe ſtand ſoutheaſt from you, there you can come over along the Riffe. You ſhall have then upon the taile of the Riffe, with low water not leſſe then 7 elles water for it is flat and broad, on the in-ſide it is very ſhoare and ſteepe, and goes in with a Bight but you may wel goe thereon upon the lead.

From the fourth buy, till in the Bight of Rottum, is the courſe eaſtſoutheaſt marked with F. and lyeth upon 7 fathom, from this unto the high-plates-buye, is the ſixth black buy, marked with G. and lyeth upon 7 fathom, as alſo forth unto Huyberts buy (H) is the courſe eaſt and by ſouth, when the Cape upon the ſouth ſide and the ſteeple come over againſt another (which ſtand ſouthſouthweſt from each-other) then you are next unto huyberts-buy, goe then eaſtſoutheaſt on, till the innermoſt Huyberts-buy (I) which lyeth alſo as the firſt Huyberts-buy upon 6 fathom, on the weſt-ſide of thoſe buyes have you, Huyberts-plate, which is now ſeperated from Huyberts-ſand, and men may underſaile it with low water, it is in the fareway 12, 13, and 14 fathom water, from the innermoſt Huyberts-buye (I) into the buy before the Wat, called Steven Ianſz-buy (K) is the courſe ſoutheaſt, and lyeth upon 8 fathom, being paſt the buy upon Huyberts-plate, you muſt turne ſomewhat off, and have a care of Borckum and Mieuwen-ſteert, which ſhooteth off from the Woldes or the ſouth-end of Borckum which men may underſayle in 5 fathom, when they will be in that fare-water.

Huyberts-buy. Steven Ianſz. Mieuwen-ſteert.

Weſtward from Steven Ianſons buy ſtand five Beakons, there by ſouth goeth the Wat in, north and by eaſt, almoſt ſo far from Steven Ianſons-Buy, as the innermoſt Huyberts-buy doth lye from Steven Ianſons-buy, there ſhooteth alſo an out-point or Riffe out, called Ranſel you may underſaile it upon 5 fathom, the marckes of this Racke, (and for to have a care of the taile or Ranſel) are theſe: upon the ſouth-end of Borckum lye two little Downes called the Wolden, keepe the ſteeple of Borckum on the weſt-ſide of the little Downes, then you ſhall not fall into Ranſell, in this Rack is it deepe 9 and 8 fathom, from Steven Ianſons buye unto Doecke buy (L) is the courſe eaſtſoutheaſt, you doe find there by ſouth of this buy a Beakon (M) called Ruyte Baken, the buye lieth upon five fathom, and in the farewater it is deep three fathom, the floud falleth very ſtrong behinde this buy into Deeke-gat, where of you muſt have a care. From Doeke-buy unto the Camper-buy, is the courſe eaſtſoutheaſt, marked with N; from thence unto the buye of Eems-horn (O) is the courſe ſoutheaſt, doe lye both upon 5 fathom, in the midſt of the fare-water, is it deep 7 fathom; the markes of the buy of Eems-horn are theſe: When the Cloyſter of the Dam (a flat Church) comes a like with holwyrde, then you have the length of the buy, then ſtand theſe markes about ſouth and by weſt from you, from the buy on Eems-horn, which ſtretcheth ſoutheaſt, you doe find on the ſouth-wall five Beakons, ſayl al beyonde the ſame, from thence on the Groniger-Dike, ſouthſouthweſt, untill you get the Church of uytwyrde and the Cloyſter of the Dam one in another, turne then next unto the ſide of Delf-ſile, for being paſt Boecke-buy, you may goe forth on the VVeſtwall, unto Otterdum, upon 5, 6, and 7 fathom, and doe not come nearer for the ſame is very ſteep; the Eaſtwall, in ſayling up, you may goe on by the lead upon 6 fathom, behinde a Plate, called the Hondt, an hard ſand, and more inward lyeth alſo another plate, called the Paep, being alſo an hard ſand, & runneth through betwixt Killetie, but the VVeſt-wall is weake and Clay-ground, till unto Otterdum, you muſt keep all the VVeſt-wall, and follow the Beakons which doe ſtand there all along, the ſome Rack ſtretcheth ſouthſouthweſt and ſouth and by weſt, and alſo beyond in the Bight ſouthſoutheaſt, and by the land of Groningen ſoutheaſt.

Ruyte-baken. Ranſel. Marcks of the buy of Eems-horn.

The Eaſter-Eemſe.

Runne upon the grounds of Borkum upon 5 fathom and ſet the ſteeple of Borkum, with the new Cape (ſhort by made there) over againſt another, then they ſhall ſtand ſouth from you, or comming out of the weſt, keep the ſteeple upon Iuyſt, eaſt and eaſt and by north from you, then you doe finde the firſt buy, or utmoſt buy, upon five fathom, from the utmoſt unto the ſecond is the courſe eaſt and by north, from the ſecond unto the third eaſtſoutheaſt upon 5 fathom, theſe doe lye al upon 5 fathom, in the farewater it is firſt 5, 6, 8, and 10 fathom deep.

The end of the Iuyſter-Riffe, betwixt the utmoſt and the ſecond buy, is on the inſide ſo ſhorre or ſteepe, that you may not goe upon the lead, but more inward from the ſecond buy is it flat, from thence you may goe in good order upon the lead.

The third buy lieth upon the point of Brewers-plate, on the eaſt-ſide of Borckum, which you may underſaile, the taile is on the northſide very ſteepe ſaile ſo forth eaſtſoutheaſt on, till you come next the Beakon upon high horn, there is a good Road upon 5, 6, or 7 fathom, and good to lye for ſoutherly wind, though with a floud, you may well goe one eaſt and ſomewhat northerly, otherwiſe you ſhould come within the point of the foreſaid Brewers-plate; the Iuyſter-Riffe lieth inward from the ſecond buy or flatneſſe, ſo that you may goe on there upon your lead in 5 or 6 fathom; when you are a little by eaſt the third buye, goe then ſoutheaſt on, there beſides is the Eaſter-Eemſe wide and broad, the eaſt-end of Borckum is flat, you muſt have a good care upon your lead, when as you ſaile there out or in with a deep-going Shipp, and ſo you doe come with an ſoutheaſt courſe on the Kings-plate, there upon the point or taile lieth a buye, and upon the plate a Beacon, leave this buy and Beakon on Starboard. At norden in Eaſt-Freeſland ſtand two ſteeples cloſe together, whereof one is thick and great, and the other low and ſmal, when theſe ſteeples come with the north-end of Bandt (a little Iland upon the Wat) beſides each-other, you have then the buye upon Kings-plate theſe are good markes there along, and when the ſteeple of Iuyſter comes northnortheaſt from you, that are good thwart markes of the ſame buye.

Brewers-plate. Kingsd plate.

From the buye upon the Kings-plate, unto the buy upon the Weſterbalgh, is the courſe ſoutheaſt, ſo long untill you have both the Capes upon Bandt over againſt each-other then is the buy ſouthſouthweſt from you; From the firſt buy of the Weſterbalgh unto the ſecond, is the courſe all ſouthſouthweſt, alſo is the whole Weſterbalgh, you can doe no harme when you keep both the Capes upon Bandt ſtanding over againſt each-other, for to runne out of the Balgh, but upon the laſt you muſt goe on ſomewhat weſterly. From the Balgh-beakon, to the beakon upon Eems-horn, is the courſe ſouth and north; to ſaile from theſe Beakons through the Gaetjen (or hole) unto knock, is the courſe ſouthſoutheaſt, and from thence unto Loeger-horn Eaſt.

To the eaſt of Iuyſt lieth Buys, the ſhorteſt and ſmalleſt Iland that is upon all this coaſt. It riſeth up in two Hommocks, where of the Hommock, which is the moſt eaſterlyeſt is the higheſt and ſharpeſt.

Betwixt Iuyſt and Buys goeth in the Buyſdeepe: the Wor-Counſell or Embden was wont to ſet it with buyes, but it is donne no omre, in regard it doth ſo oftentimes ſhift.

Buysdeep.

Two great leagues to the eaſtwards of Iuyſt Buys. Norderny, betwixt them both lye that little Iland Buys. Norderney is to be known by a broad flat tower, which ſtandeth upon the weſt end, but ſometimes men can hardly perceive it. About the midſt of the Iland, neareſt the eaſt end lyeth a high white ſandhill, thereby it is beſt to beknouwn. For there the Land is al ful of Hommocks. Betwixt Norderney and buys goeth in a channell, called the Norderdeepe, or Norderny.

Norderny

A great league to the eaſtwards of Nordernye lieth the Iland Baltrum, which is about two leagues long, a little ſhorter then Nordernye. Upon this Iland ſtandeth no ſpeciall thing, whereby men may know it: but upon the eaſt end a high ſandhill, which is ſharp above, the weſt end is low ſandhilles. When the foreſayd high ſandhil is ſoutheaſt and by eaſt from you then it is round to ſee to. Upon the Weſt end there goeth a ſwamp through.

Baltrum.

Betwixt Baltrem and Norderney runneth in a channell, called the Wichterie, there is no certainty to be written of it, that men may truſt to, ſometimes there is two fathom water, and more, and ſometimes no more then foure, or five foote.

Wichtery.

The Iland Langeroogh lieth a league to the eaſtwards of Baltrum which is foure great leagues long, and hath on the off-ſide a faire ſtrand, and three or four ſandhilles, where by men may know it, which lye from about the middeſt of the Iland unto the weſt end, a good wayes one from the other, the tops of them are plaine and flat. Betwixt Langeroogh and Baltrum goeth in the Acumy, where in lye two buyes. It is no channell for great ſhips, it lyeth out alongſt by the foote ſtrand of Langeroogh, firſt northeaſt, and then ſomewhat more eaſterly, but it is not to be truſted to, becauſe it altereth and ſhifteth very often.

Acumy.

Betwixt Langeroogh & Wrangeroogh lieth the Iland Spykeroogh which is about a league long. At the eaſt end there was wont to lye a little Iland, good to be known, called Luttick Spykeroogh, which is now altogether gone. Upon Spykeroogh ſtandeth nothing, whereby men might know it,

Spykeroogh.

Oxebalg. but it is a black land, with Hommocks and Nobbes like to the other Ilands: betwixt Spyckeroogh and Langeroogh goeth in the Oxebalgh.

Wrangeroogh. Wrangeroogh lyeth two great leagues to the eaſtwards of Langeroogh, which is a great league long, being a little plaine white Iland: Upon the eaſt end lie high broad white ſandhilles: Upon the weſt ende the Earle of Oldenbourgh hath cauſed to be made a great thick tower, with 2 ſpires, when they ſtand on right in the other, then you are by the outer buy of the Weſer; the foreſayd towre, men may ſee two kenning off at ſea. Betwixt Wrangeroogh and Spykeroogh goeth in the Harrel, about ſouthſoutheaſt, but it is not to be truſted becauſe it ſhifteth very often.

The Acumy and Harrell are ſet both with buyes by the Wor-cunſull of Embden: Theſe channell ſerve not but for ſmall ſhips, like as all the other, lying betwixt the Eaſter Eems and the Weſer.

The land lyeth from Bornriffe to Wrangeroogh eaſtnortheaſt and weſtſouthweſt 29, or ſome will have it 30 leagues.

For to ſayl into the Iade or Weſter Weſer with a ſoutherly winde, runne to the ſtrand of Wrangeroogh in foure fathom, with a weſterly winde runne no further then five fathom, and lead it in ſo by the ſtrand of Wrangeroogh, in 4 or 5 fathom, untill you come a good wayes within, or to the end of foote ſtrand of Wrangeroogh, there you ſhall finde the firſt buye in five fathom at low Water: Menſer-church ſhal then ſtand ſouth from you. Thwart of this firſt buye the redde-ſand is very ſteepe, which you muſt leave on the larboard ſide, and the buye on the ſtarboard ſide, when you come in. Thwart of this firſt buye commeth a tayle, ſhooting off from the ſouth ſhoare, that is the innermoſt poynt of the Stonebalgh, which men might, at unawares ſayl within in three fathom and an halfe, or foure fathom, the firſt buye is laid upon the point of this tayle. The Stonebalgh goeth in to the eaſtwards of Wrangeroogh the ſouthſide where of is ſteep, but the north ſide flat, which men may ſound. In this Balgh it is ten foote deepe at low water. From the firſt buye to the ſecond, and alongſt to the third, the cauſe is eaſt, the ſecond buye lyeth in two fathom and an half: The third, that is the Jade buye, lieth in three fathom, upon the ſhowldeſt of the High-waye. It is very uneven betwixt the firſt and the third buye, you ſhall get wiſe depth of five or ſix fathom and then again 2 fathom or 2 fathom and an half.

For to ſayl from the Jade to the Weſer, then ſaile by the third buye over the ſhowldeſt of the high way on eaſtnortheaſt to the Mellembuye, and you ſhall finde at low water upon the foreſaid ſhowldeſt place, or by the third buye, no more water then 9 or ten foote, and being over there you ſhall get againe deeper water, and then you are in the Weſer: Reckon well your tydes for the ebbe falleth very ſtrong northnorthweſt out at the Jade, and the floud to the contrarie, very hard inwards, ſo that you can hardly ſtemme the tyde, when the weather is ſomewhat calme, whereof you muſt be very carefull.

For to ſayle up into the Jade, leave the foreſaid third buye on the larboard ſide, and go from thence moſt ſouth up, unto the point of the Deyke, called Hommerſcheel, when you are come by the Dyke, there the Iade is wide and broad, without the foreſaid Dyke ſtandeth a beacon or two, for ſhipps that are bound over the Wadt: If you will ſaile further, up into the Iade, then keepe the weſt ſhoare, untill you come thwart of the church without a ſteeple, which ſtandeth by the Dyke, there you muſt leave the weſt ſhoare, becauſe of the Aenten or Leppe plate, which ſhooteth off from the Veer, alongſt the weſt ſhoare, and ſometimes lieth drye at low Water. The weſt ſhoare lieth moſt ſoutheaſt ſomewhat ſoutherly.

A ſouth and north moon maketh the higheſt water upon the Iade, and it floweth with an ordinary tyde 2 fathom and an half up and downe.

The Weſer.

For to ſaile up the Weſer, come no nearer Wrangeroogh then ſeven fathom, being in ſeven fathom, then edge off from the ſhoare into 11 fathom, and you ſhall finde the firſt buye at the comming into the Weſer, lying in ſeven fathom upon the taile of the Red-ſand, Menſer Church (that is a flat Church without a ſteeple in Vroukens land) is then ſouthſoutheaſt from you. Being thwart of the firſt buye, and that the weſt end of Wrangeroogh is ſouthſouthweſt from you, then you run over the taile of the Red-ſand in 5 fathom.

From the outermoſt buye to the ſecond, third, fourth, and fifth, the courſe is due eaſt, which lye all in ſeven fathom, the ſouth ſide (to wit the Red-ſand) neareſt each a point different from Menſer church, ſo that Menſer church lyeth from the ſecond ſouth and by eaſt, from the third ſouth, from the fourth ſouth and by weſt, and from the 5 ſouthſouthweſt. The fifth buye is called the buy upon the Head, for to know that from al the other buyes, there ſtandeth a ſtaffe upon it of a halfe fathom long. With a white knotte upon it. Over againſt the buye upon the head lieth a white buye on the white grounds. Betwixt all the foreſaid buyes you muſt reckon wel your tydes, the floud cometh out of the northweſt, and falleth alongſt over the Redde-ſand, & the ebbe to the contrary. The right deep thwart of theſe foreſaid buyes, in the comming in is 11 fathom, but thwart of the buye upon the Head, 5 fathom at low water.

Middle-plate. Right before the Weſer lieth the Middle-plate, the Eaſtermoſt or the Innerſide beginneth right to the northward of the buye upon the Head by the white grounds, and lieth alongſt the reach unto the third buye, to reckon from without, and is on both ſides flat for to ſound about. On the weſt ſide of the foreſaid plate lyeth a white buy about from Menſer Church, which you muſt leave in comming in on the larboard-ſide.

For to ſail from the buye upon the Head, out again to the eaſtwards of this plate unto the Elve. Then ſound it out about the white grounds, in 4 or 5 fathom, until you be out in the ſea.

Buye upon Bolenzile. For to ſaile further up into the Weſer, the courſe from the buye upon the Head unto the 6 buye is S. E. and N. W. Menſer Church ſhall then lie from you ſouthweſt and by ſouth, the Weſer is thwart of it about 20 fathom deep. From the ſixth buye to the ſeventh, that is, the buye upon the Cours, or the Wapperbuye, or the ſouthweſt buye, becauſe Menſer Church lieth ſouthweſt off from it, the courſe is ſoutheaſt. The Iade buye lyeth about ſouth, or ſouth and by weſt from this buye. From the buye upon the Cours unto the Mellem buye the courſe is yet ſoutheaſt, which you might ſaile within are unawares is ſixe fathom. Menſer Church lieth off from it ſouthweſt and by weſt. From the Mellem buye to the buye upon Bollenzile the courſe is ſoutheaſt ſomewhat eaſterly, you muſt reckon your tides there verie well, becauſe the floud falleth exceding hard in to the weſt ſhore, Langworder Church lieth right ſouth and by eaſt from that buye upon Bollenzile, over againſt it upon the point of the black grounds lieth a white buye, come no nearer to it at half floud then 4 fathom and an half, you might unawares ſail within that point (in ſailing in) in 4 fathom. From the buye, upon Bollenzile to the beakon upon Bollenzile the courſe is ſouthſoutheaſt, or ſoutheaſt and by ſouth. Langworder church lieth about ſouth from that beakon, you muſt leave it on the ſtarboard ſide comming in within that beakon upon Bollenzile is a good roade for a weſterly winde. From the beakons upon Bollenzile to the firſt buye upon the flat, the courſe is ſoutheaſt til you come ſomewhat beneath the beakon, and then alongſt eaſtſoutheaſt. The marks of the firſt buye upon the Flat is, when you can ſee through the belhoals of Langworder ſteeple, then you are thwart of the firſt buye, Langworder Church is then from you ſomewhat more ſoutherly then ſouthſouthweſt. From the firſt buye upon the Flat to the ſecond, the courſe is e. ſ. e. Betwixt theſe two buyes ſtande five beakons on the larboard ſide, upon the black grounds. From the ſecond buye upon the flatte to the Meyland the courſe is ſoutheaſt and by ſouth. Being come thwart of Wadnis or the Meyland, ſail then cloſe along by the green ſhore, untill you come within Blixem, there is the rode for great ſhips that are bound to ſea.

Like as upon the Iade, ſo alſo upon the Weſer a ſouth and north moon maketh the higheſt water, it floweth there alſo 2 fathom and an half up and downe.

South-grounds. To the eaſtwards of the Weſer lye the ſouthgrounds of the Elve, there go in 2 faire deep Balghs or Creeks of 10, 12, and 13 fathom. The Till, called alſo Broadbalgh, is the weſtermoſt, and lyeth ſo for to the weſtwards, that men can but even ſee the New-worcke from thence.

If it ſhould happen that comming to the eaſtwards of the Weſer, you ſhould be beſet upon the ſouther grounds, being a leſt ſhore, and be in danger, then ſaile to the ſouthgrounds in 4, 5, and 6 fathom, but not much nearer alſo, for they are ſomewhat ſteepe. When you (ruuning ſo along by theſe grounds upon the ſame courſe) ſhall get 8, 9, yea 10 or 12 fathom ſoft ground, then that is certainly of the Broadbalgh or Weſter Till, take then the ſounding of which ſide that you will, and ſound it about by the grounds in 4 or 5 fathom, and you ſhall find amongſt the ſands ſmooth water, and good rode, and may lye ſheltred for all winds. The weſter Till lyeth in firſt E. S. E. alongſt by the north ſhore it is deepeſt, on the S. ſhore you can not ſail within, any tailes, in ſailing out, but you may in ſailing in: when you come ſomwhat further in, lieth up more to the ſouthwards: there are divers Balghs or channells,

Eaſter Till.

channells, where men may ſaile through that are acquainted.

wester Til. The Easter Till or Broadbalgh lyeth betwixt the Weſter Til and the Hondtbalgh, which runneth in 7 fathom into the eaſternmoſt point, (or the old Scorhorne) that is a taile which lyeth off a good wayes, and which you might at unawares ſail within in 7 fathom comming from the weſtward. This Till lieth in alſo (like as the other) firſt eaſtſoutheaſt, but a little further in more eaſterly. Here alſo you may take the ſounding of which ſide or ſhoare that you will.

Being come within, you ſhall get ſmoot water of the ſands for all winds. In this channell is not leſſe then 7 fathom water.

Hondt-balgh. The Houndtbalgh lyeth right into the weſtwards of the Steep-buye or Schorhorn. If you will goe in there with ſmall ſhipps for to ſaile over the Wadt into the Weſer, then goe (when you have the Steepe-buye) in ſouthſoutheaſt. The Hondtbalgh is without indifferent wide, keepe that courſe, untill you come thwart of the beakons, which you muſt leave on the ſtarboard ſide, you may well ſound in about the off-ſide of the Schor-horne, but not the weſt ſide, by it lye plates, which you might ſaile foule of in 9 fathom, in comming in, but on the Schor-horne you can not doe amiſſe.

Holy land.

The Iland Holyland, and the outermoſt buye in the Weſer, lye one from the other, ſouth ſomewhat weſterly, and north ſomewhat eaſterly. When it is cleare and good ſight, you may ſee Holyland, when you lye in the Weſer, by the buye upon the head. Holyland and Bornriffe lye one from the other ſouthweſt and by weſt, and northeaſt and by eaſt according to the common opinion, two and thirty leagues. When you come from the weſtwards, and begin to get Holyland in ſight, it ſheweth it ſelve with a high reddiſh ſteep point, which is flat above. For to anckor or make rode under Holyland, comming from the weſtwards, then runne to that land in tenne or twelve fathom. When you ſaile towards the ſouth point, and come

Monck. ſomewhat near the land, you ſhall eſpie a rock, like unto a ſmal towre, cloſe by the high land, called the Monck, which is almoſt ſo high as the high land. About ſouthſoutheaſt an Engliſh mile, or a little more from that rock, lyeth a rock under

Rock under water. water. If you keepe your ſelf in eight and nine fathom, then you run without this rock, and can not take any hurt of it: When the Monck is covered of the other land, then you are thwart of this ſuncken rock. When the foreſaid Monck cometh a handſpikes length, paſt or without the other land, there is the road; and good anckoring in ten or eleven fathom, the ground is there faire and cleane, except it be of wracks of loſt ſhips, or loſt anckors, which are there may. Lying there in nine, tenne or eleven fathom, you have ſhelter for a weſt-ſouthweſt, northweſt and north windes. From the point where the Monck ſtandeth by, ſhooteth off a little riffe from the ſhoare, which men may ſound in three fathom, you may alſo runne in five fathom from the ſhoare, and ſaile cleare of the foreſaid ſuncken rock, to wit, through betwixt the ſuncken Rock, and the little riffe: but if you runne into deep water, to wit, in ſeven fathom, you ſhall runne right upon the ſuncken Rock. In eight or nine fathom you doe runne about without the ſuncken Rock.

From the north ſide of Holyland lyeth off an evill Riffe, almoſt a league into ſea, ſo that you can not come no nearer the whole north ſide, then in nine or ten fathom. If you will goe

Scholvers point. about to the northwards of Holyland, being come ſo farre that the eaſt end of Holyland come to be ſouth and ſouth and by eaſt from you, ſaile then freely unto the Scholvers point, that is a flatte point, which you may ſound in 5, 6, and 7 fathom. If ſo be that you will runne in eight fathom off from it, you ſhal runne above two great leagues from the ſhoare. The right fareway betwixt the Hever and Holyland is not more then nine or tenne fathom deepe. When you come about the point to the rode, and that Scholvers point lye northeaſt, and the Rock ſouthweſt from you, there is good lying in 5 fathom.

South-haven. Scholvers point is the point where the South Haven lyeth within, which lyeth from the high land about eaſt into ſea. From the outermoſt end of Scholvers point lyeth a banck of three fathom, unto the point where the Monck alſo ſtandeth, within it is very good lying for ſhipps of little draught, that is called the ſouth Haven of Holyland. A ſouthſouthweſt and northnortheaſt moone maketh there the higheſt water.

Of the Elve.

The Rode of Holyland, and the outermoſt buye of the Elve (called the Schortunne or the Steep-buye) lye right ſoutheaſt and by eaſt and northweſt and by weſt eight leagues aſunder, which lieth right to the northwards of the Schorhorn, that is the outermoſt point of the New-workes grounds, on the ſouth ſide of the Elve, the right deepe of the Elve runneth in alongſt to the northwards of it. On the north ſide of the Elve Mirle of voghel-ſand. lie the North ground, which lie ſomewhat flat far off to ſeawardes upon the northweſt ſide. The ſouth end of the North-grounds, called Voghelſand, runneth from the foreſaid buye a good waies weſt and by north into ſea, with narrow taile of perfect harde ſand, about a halfe league broad, which waxeth by little and little the farther from the ſhoare the deeper. Three leagues from the foreſaid buye, there is upon it eleven fathom water, when you ſaile on north from the ſteep-buye, you runne over it in three fathom, or three fathom and a halfe, but it doth ſoone deepe againe in five, ſeven, eight and tenne fathom, ſoft ground, that is in the creeke of the North Elve. To the ſouthwards of that a foreſaid Voghel-ſand, in the right fareway of the Elve (for him that commeth from the weſtwards) it is alſo ſomewhat ſoft ground, and fourteene and thirteene fathom deepe, to the ſouthwards of it, towards the ſouther or Steepe grounds, the ground is againe very hard, and the grounds very ſteep, you may not come nearer them (eſpecially by night or darke wether) then in eleven or twelve fathom, if you come nearer to them, you might ſaile foule of the weſter Till, or Souther-Broad-balgh, which runneth up to the ſouthwards into the grounds to nothing. North-Elve.

When you come from the weſtwards, and ſaile to the Elve, you ſhall finde betwixt Holyland and the Weſer, and thereabouts ſomewhat to the eaſtwards, depth of twenty fathom, untill that you come well halfe wayes to Holyland, towards the Steenbuye, then it doth begin to ſhowld from eighteen to ſixteen and fourteen fathom, cloſe by the Steep buye it is 12 fathom deep.

If you come by night alongſt by the ſteepe or ſouther-grounds, with a ſoutherly winde in twelve or thirteen fathom, and goe on eaſt and by north, you ſhall at laſt meet with the ſholding of the New-workes-grounds, right to the northwards of the Hondt-balgh in eight and ſeven fathom, there you muſt then let fall your anckor, for to ſtay for the day, and you ſhall finde your ſelf not farre from the buye. With northerly windes you muſt anckor further from the ſouth ſhoar in the foreſaid ſhowlding in eleven or 12 fathom.

To the northwards of the foreſaid narrow taile, or ſhowlding, which lieth off from Vogelſand, runneth in a great bight or Slenck into the norther grounds, called the Norther Elve, Norther Elve. it is in the going in ſomewhat within, ſo broad that you may there in turne to windewards, but within it runneth narrow and ſharp too; and at laſt to nothing, (ending allmoſt againſt the whitebuye, which lieth upon the Elve, upon the taile of the New-grounds) it is going in more then halfe waies thirteen and twelve fathome deepe, and ſoft ground, verie much like the right Elve. It happeneth oftentimes by darke wether that the ſhippes (thinking that they are entred into the right Elve) runne in there, ſometimes which danger, eſpecially with weſt-northweſt windes, for they muſt come out there back againe. When you ſaile off from Holyland on eaſtſoutheaſt, you ſhall have depth of twelve or thirteene fathom, being a league off from it, that you leeſe the white cliffe out of your ſight, then you ſhall get one eve depth of thirteen fathom, and ſoft ground, all alongſt untill you come within the foreſayd north Elve. When you ſhall perceive that you are entret in there, you may (when the New-worke is more ſoutherly then ſouth-eaſt and by ſouth from you) run alongſt over the taile of Vogelſand in 5 fathom, and ſo come againſt the Steep-buye upon the right Elve.

For to ſet ſaile by night from the road of Holyland, the courſe is ſoutheaſt and by eaſt, then you ſhal run over the foreſaid taile of Voghelſand in ſeven and eight fathom, and ſomewhat hard ſandy ground. If you then run a little more ſouther-ly, you ſhall get againe twelve and thirteene fathom, and ſomewhat ſoft ground, that the right deep or channell of the Elve betwixt Vogelſand and the ſteep-grounds. If you runne then more ſoutherly, you ſhall get againe ſomewhat hard ground of the ſouther grounds, which are (as hath beene here before ſaid) very ſteep and hard, when you come neare them in twelve or eleven fathom, you muſt edge off againe from them unto twelve or thirteene fathom, and alongſt by them towards the ſteepe-buye, unto the foreſaid ſhowlding of the New-workes grounds, and there ſtay for the day light.

When you come by day from Holy-land or from the weſtwards, and that you get New-worke in ſight of you bring that and the Cape one in the other, and ſaile ſo right in with them, then you ſhall finde the ſteepe-buye, which lieth (as hath beene already ſaid) towards the ſouth land on the ſide of the Schorhorne the outermoſt poynte of the

New-grounds in ten or eleven fathom. From the Steep-buye to the Kool-buye, that is, the ſecond buye, the courſe is due eaſt, which lyeth in eight fathom. Upon the New-work ſtand three country mens houſes, the middlemoſt of them, and the ſteeple of the New-worke come one in the other when you come to the ſecond buye. The third buy lyeth in ſix fathom, from the Kool-buye eaſt and by north ſomewhat eaſterly, but neareſt eaſt and by north. The fourth lyeth in five fathom from the third, eaſt and by north. Betwixt theſe buyes a little within the third, runs a deepe Creeke eaſtſoutheaſt into the New workes-grounds, called the Kinder-balgh, which is wide at the entring in, and at half flood well nine fathom deepe, but runneth at length altogether drye to nothing. Hee that cometh running alongſt by the ſouth-grounds, might lightly get in there, therefore the third buye lyeth a little further off from the South ſhoare, becauſe men ſhould avoyd that Creeke. Betwixt the third and fourth buy on the north ſide of the deep lyeth a white buye in three fathom, upon the tayle of the New-ground, which men might ſaile within, when they come inwards, that you muſt leave on larboard ſide, and all the black buyes on the ſtarboard ſide.

New-ground.

The foreſayd white buye and the New-worke lye north-northeaſt and ſouthſouthweſt one from the other, to the eaſtwards of it the north ſide is very ſteepe. The fifth buye lyeth in three fathom and a halfe, or 4 fathom, and lyeth from the fourth due eaſt.

The ſixth buye, that is the poynt buy, lyeth in ſix fathom, from the fourth and fifth due eaſt. In the right deep to the northwards of theſe foreſayd black buyes from the Koolbuy to the poynt buye in the right fareway, it is all alongſt ſixe and ſeven fathom deep. From the poynt buye to the buye in the Roſſe, the courſe is ſoutheaſt which lyeth in 7 or 8 fathom, when the Ros beakon commeth to the little ſteeple of Gron or Groen, then you are thwart of this buye. Halfe wayes betwixt the poynt buye, and the buye in the Roſſe, lyeth yet another buye on the ſouth ſide, which is there betwixt them both exceeding ſteepe and needle too. Right eaſtſoutheaſt from the poynt buye over againſt the buye in the Roſſe, ſomewhat further inwards, lyeth a white buye upon the tayle of Romaerl plate, which men might at unawares ſayle within, in foure or five fathom when they ſaile upwards. When the little ſharpe ſteeple of Woord commeth to the weſtwards of Oldenbroek (that is a church with two ſpires upon one ſteeple) then they are ſouth from you, from thence inwards you may ſound Romaerl plate in ſix fathom without danger, otherwiſe it is on the off-ſide very ſteepe From the Rosbeakon to Brunsbuttell are five leagues, betwixt the buye in the Roſſe, and the buye upon Romaerl plate begins a ſand lying right in the middeſt alongſt the fareway about two leagues long, called Pilgroms-ſand, upon it alongſt no more then two fathom water, or a little more, upon it lie three black buyes, and over againſt it on the north ſide, two white buyes, you muſt ſaile through betwixt them, alongſt to the northwards of that ſand, being paſt it, you ſhall come upon the flat. There lye yet two buyes which you muſt leave alſo on the ſtarboard ſide in ſayling up, before you come to Brunsbuttell. All the depths here before mentioned, are reckoned at halfe flood,

From Brunsbuttell to the buye upon Salſhorne, or Friburger-ſand, the courſe is eaſt, and eaſt and by north alongſt by the north-land. From Salts-horne to the buy againg the Steur eaſt and by ſouth, and eaſtſoutheaſt, from the Steur to the buye upon Gringer-oorts-ſand ſoutheaſt, and ſoutheaſt and by ſouth, that lyeth againſt Bilenburg more then halfe wayes in the deepe. Betwixt this buye and the buye upon the Steur lyeth another buye in the fare-way. From the buye of Gringer-oort to the buye upon Stader-ſand ſoutheaſt and by ſouth, and ſouthſoutheaſt. This buye you muſt leave on the ſtarboard ſide. From Stader-ſand to Willems-fliet, or the buye upon the Luye it is ſoutheaſt, and ſoutheaſt and by ſouth, and from thence to the buye upon Terloo eaſtſoutheaſt. From thence to the buye upon Hanneball, the courſe is eaſt and weſt. From Hannebal to the buye upon Blanckenes ſand eaſt and by north, you muſt keepe that buye right with a great tree, and then run alongſt by the north land untill you bee paſt the buye.

From Blanckneſſe ſand unto the buye in the bight, the courſe is eaſtſoutheaſt, and from thence unto the Eckhout eaſt and by north in the right channell it is there three or 4 fathom deepe, there lye the great ſhips for to lade and unlade.

The Eyder.

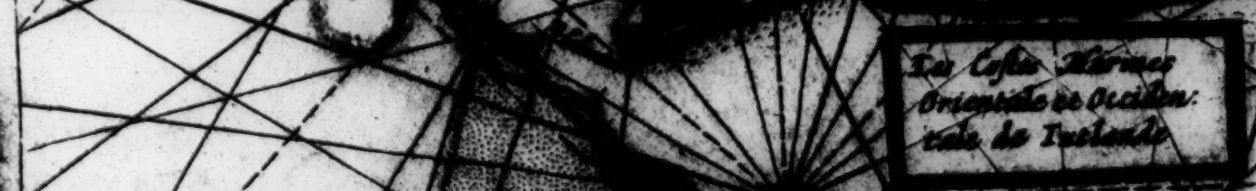
Six leagues to the northwards of the Elve lyeth the Eyder, with many ſhowlds lying farre out without the land, chiefely and moſt on the ſouth ſide, on the north ſide of the deepe alongſt by the land of Eyderſtee lieth a long ſand called the Broad-back, or New-grounds, on the ſouth ſide lye Blavoort, the Iron Hendrick, the Hound of Heckſand. To the ſouthwards of Blavoort, and the Iron Hendrick, about a league to the ſouthwards of the mouth of the Eyder, goeth yet a Deep in, called the North pipe, where men may ſayle in, and come out againe by the Hound upon the Eyder. In this Eyder lye on the ſouth ſide of the Deep ſeven black buyes, which you muſt leave all (in ſayling in) on the ſtarboardſide, and on the north ſhoare, which you muſt leave on the larboard ſide. The outermoſt buye lieth from the ſteepe buye right north, and from Holy-land eaſt or a little more northerly 7 or 8 leag. When you fall with the land with that courſe you ſhall eſpy to the northwards of the Eyder, upon the land of Eyderſtee, a ſharpe ſteeple indifferent high, called Gardingen, bring that over or to the ſouth ſide of the little ſand-hils lying on the north ſide of the Eyder, called the Souther-Heads, they ſhall then ſtand from you northeaſt and by north, or a little more eaſterly, ſayl right in with hem ſo, and you ſhall fall with the outermoſt buye, when that then the ſharpe ſteeple of Weſlinburen, ſtanding to the ſouthwards of the Eyder in the land of Ditmarſen commeth to be eaſt or a little more ſoutherly from you, then you have the length of the foreſaid buye, and then S. Peters Church upon the Eyderſtee to the weſtwards of Gardingen, not farre from the ſea ſide, ſhall ſtand from the north-northeaſt. Thus, or comming out of the ſouthweſt upon the foreſaid markes of Gardingen, and the Souther-heads, you ſhal run over the ſhowld of Blavoort, which men do call alſo the taile of the Hound, lying off from Blavoort almoſt halfe waies to Holyland. It is alſo by ſome called Blavoort, or comming from the northwards, bring the foreſaid ſteeple of Weſlinburen eaſt or a little more ſoutherly from you, and ſaile ſo right in untill that Gardingen commeth to the foreſaid ſouther-heads, or that S. Peters church bee N.N.E. from you, in doing ſo you ſhall not miſſe alſo the outermoſt buye. From the outermoſt buy to the ſecond, third and fourth, it is al one courſe E.S.E. the ſecond lieth upon the ſhowldeſt of the channell at low water in 16 foot, the third in foure fathom, and the fourth in five fathom.

Theſe three laſt lye alongſt the north ſide of Blavoort, on the ſouth ſide of the deepe. In ſayling in, you muſt leave them all on the ſtarboard ſide, and runne alongſt to the northwards of them. From the fourth to the fifth, that is, the buye upon the Hound, the courſe is eaſt, which lyeth thwart of the Hound, on a poynt which lyeth of from Heckeſand, which in comming in, men might at unawares ſayle within alongſt to the ſouthwards of the buye, therefore you muſt leave that alſo (as well as the former) on the ſtarboard ſide, and ſayle alongſt to the northwards of it. Betwixt this foreſayd buye upon the Hound, and the fourth, lyeth another buye upon the north ſide of the deep, upon the ſouthermoſt poynt of the New-grounds, which you muſt leave on the larboard ſide, and run about to the ſouthwards of it. From the buye upon the Hound to the ſixth, the courſe is northnortheaſt, two fathom deep. From the ſixth to the ſeventh and laſt buye northeaſt and by north, and the deepe alongſt to the northwards of it three fathom. Being paſt the laſt buye, follow the beakons, which ſtand alongſt on the north ſhoare, until you come to Hulck, runne cloſe alongſt to the ſouthwards or to the eaſtwards of them, for to avoyd a tayle of ſand, which commeth off from the eaſt ſhore, which men might unawares ſayle within into a Dead-creeke. From the Hulck to Schulperzile, the courſe is eaſtſoutheaſt. In that reach, the beakons ſtand on the ſouth ſide upon the Ballaſt-plate, and you muſt run alongſt to the northwards by them, leaving them on the larboard ſide. From Schulperzile to Tonningen the courſe is northnortheaſt. Before Tonningen the Eyder is at the ſhowldeſt, and at low water no deeper then one fathom and a halfe. From thence further in towards the New-town called Frederickſtadt, there is depth enough.

The depths here before mentioned are al to bee underſtood at low water. From Tonningen towards Wollerſum, the Eyder lyeth alongſt northeaſt and by eaſt. From Wollerſum towards Harebleck N.N.weſt. From Harebleck towards Reymers-bode northeaſt. From Reymers-bode towards Nyenzyle eaſtſoutheaſt. From Nyenzyle to the Nyen-veere ſouth.

Betwixt the fourth buye upon the Eyder and the fifth, that is, the buye upon the Hound, over againſt the buye upon the ſouthermoſt poynt of the New-grounds, ſtand two beakons a little to the ſouthwards of the foreſayd two buyes, the weſtermoſt upon the eaſt poynt of the Blavoort, or the Iron Hendrick, and the eaſtermoſt upon the taile of the Hound. Betwixt theſe two beakons goeth in through a deepe ſoutheaſt, or ſoutheaſt and by eaſt, where you may ſaile through alongſt

Pascaarte
Vande West en Oostzÿde
Vant Jutlant Mitsgaders
de Belt tot Flensborch
Nieuwlyx Beschreven
Door Jacob Aertss.
Colom.


Tot Cassel Hermen
Orientale en Occidon:
tale de Ysselande

Duytsche mylen 15 voor een graet Lieues d'Allemaigne 15 en un degré

Engelsche en Fransche mylen 20 in een graet Lieues d'Angleterre 20 en un deg

ZEE LANDT

Laland

Nicopia

Skanso

Odensee

Alsen

Nybel

Flensburgh

Ribnes

Hoyum

Ronn

Manu

Landt

Apenrade

VTLANDT

41062
MUSEUM

alongſt by the beakons upon the Iron Hendrick (which you muſt leave then on the ſtarboard ſide) untill you come into the end of the North-pipe, which lyeth from thence about weſt into ſea. You may ſound in at the North-pipe, comming in out of the ſea by the S. ſhoare in 3 and foure fathom, untill you come to the foreſayd beacons, and then about by them northweſt, or ſomewhat more weſterly up unto the Eyder, or elſe you may runne further alongſt by the foreſayd ſouth ſhore, untill you come about the beakon upon Hoedmeerſand, and then forth betwixt the Iland Bulheads and Buyſen alongſt by the Beacons upon Hoedmerſand, with many poynts and bights on to the ſouthwards, and come out at laſt upon the Old Elve, about northeaſt from the New-work againſt the New-grounds, which is not well to bee ſayled, but of thoſe that are there very well acquainted.

Alongſt by the Northſhoare of the Eyder, cloſe to the ſouthwards of the little ſand-hils, the ſoutherheads, runneth in yet a Land-deepe, eaſt and eaſt and by north in, and commeth out againe upon the Eyder by the Hulck, that ſerveth not but onely for ſmall ſhips, there remaineth at low water but five foot.

Of the Tydes and Courſes of the ſtreames.

Before the Scholbalgh, the Lawers and the Schille, and before the VVeſter-Eems a ſoutheaſt and northweſt Moone maketh high water.

Before Embden and Delfzyle a north or north and by eaſt and ſouth or ſouth and by weſt Moone.

In the Eaſter-Eems and Burckumbalgh a ſouthſoutheaſt and northnorthweſt Moone.

Before the Channells betwixt the Eaſter-Eems and the VVeſer, a ſouth and ſouth and by eaſt, and north and north and by weſt Moone.

In the fareway betwixt the Elie and the Elve, the foreflood commeth out of the north ſea, and turneth about by little and little with the ſunne, falling the halfe tyde eaſtnortheaſt alongſt the ſhoare, and the ebbe weſtſouthweſt.

Before the VVeſer and Elve, and alſo in the Eyder a South and North Moone maketh high water. The flood commeth there out of the northweſt, and the ebbe out of the ſoutheaſt, and fall very ſtrong over the grounds that lye out there.

Under Holyland a north northeaſt and ſouth ſouthweſt Moone maketh full ſea.

Of the Depths about theſe places, and in wath depths men may ſee the land.

Schiermonickoogh men may ſee in 12 and 13 fathom 4 great leagues without the land.

Rottum and Borckum men may ſee in 14 and fifteene fathom.

Thwart of Borckum the ground is groſſe red ſand, mingled with ſome black.

Iuyſt, men may ſee in 13 and 14 fathom, 3 leagues without the land it is 12 fathom deep.

Buys and Norderny men may ſee from the poop in 12 and 13 fathom.

Baltrum Langeroogh and VVrangeroog, men may ſee it in 14 & 15 fathom.

Thwart of Borjadigerland, Keidingerland and Ditmarſen, the grounds lye ſo farre without the land, that you can not ſee the coaſts, except you clim up into the top.

About Holyland it is deep 7, 8, and 9 fathom, to wit, on the inner ſide, but without on the weſt-ſide 15, 16, 18, and 19 fathom, in ſuch depth you may ſee the land of Holyland from the weſtwards.

Courſes and Diſtances.

The coaſt alongſt theſe Ilands lyeth eaſtnortheaſt and weſtſouthweſt.

From Borckum-Riffe to VVrangeroogh eaſtnortheaſt — 16 leagues
From the Eaſter-Eems or Iuyſt-riffe to the Steep-buye or Schortunne eaſtnortheaſt — 20 leagues
From the Eems to Flamborowhead weſt ſomewhat northerly 85 leagues
From the Eems to Bovenbergen north and by eaſt — 60 leagues
From the Eems to Holyland the courſe is northeaſt and northeaſt and by eaſt — 21, or 22 leagues
From VVrangeroogh to the New-worke eaſtnortheaſt — 8 leagues
From the outermoſt buye upon the Elve to the Eyder north 7 or 8 leagues
From Langeroogh to Holy-land, northnortheaſt — 10 leagues
Holyland and the outermoſt buye in the VVeſer lye North ſomewhat eaſterly, and ſouth ſomewhat weſterly. The buy upon the Head in the VVeſer, and Holyland lye north and ſouth aſunder — 8 leagues
The ſteep-buye on the New-work and Holyland lye ſouth eaſt and by eaſt and northweſt and by weſt aſunder — 8 leagues
The outermoſt Buy in the Eyder and Holy-land, lie eaſt ſomewhat northerly northerly, and weſt ſomewhat ſoutherly aſunder — 7 or 8 leagues
From Holy-land to the Holms before Yarmouth, the courſe is weſtſouthweſt or ſomewhat more weſterly. — 72 leagues
From Holyland to the Scarbrough and Flambrough head, weſt or ſomewhat more ſoutherly — 93 leagues
From Holyland to Tinmouth, or Newcaſtle, weſt ſomewhat more northerly — 106 leagues
From Holyland to Lie in Schotland, weſt and by north and ſomewhat more northerly — 120 leagues
From Holyland to Boecknes northweſt and by weſt 120 or 122 leagues
From Holyland to Hanglip in Hitland northweſt — 146 leagues
From Holyland to Bovenbergen, North and by Weſt — 50 leagues
From Holyland to the Horne, or Dodebergh, north — 32 leagues
From Holyland to Knuyts-deep, or Ryper-deep, the courſe is north and north and by eaſt — 25 leagues
From Holyland to the Deepe of Silt, or Liſt, north and by eaſt 19 leagues
From Holyland to Ameren, or Small-deep, the courſe is northnortheaſt ſomewhat eaſterly — 10 leagues
From Holyland to the outermoſt buye in the Hever, northeaſt 8 leagues

When you lye by the outermoſt buy in the Hever, in clear water you may ſee Holyland.

How theſe Lands doe ſhew themſelves at ſea.



Thus sheweth Schiermonckoogh, being two leagues thwart off from you.

Borckum



Rottum.



Thus sheweth Borckum and Rottum, when you ſayle alongſt by them, being two leagues a ſeaboard the Land.

Iuyſt.



Thus sheweth the Iland Iuyſt, being about two leagues off from you.

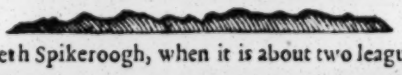
Northerly Buyes.



Thus shew the Ilands buys, and Norderney, being 2 leag. thwart off from you.



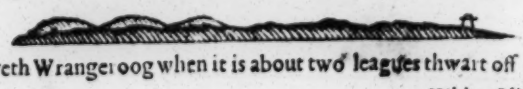
Thus riſeth Baltrum, when you are about two leagues a ſeaboard the Land



Thus sheweth Spikeroogh, when it is about two leagues from you.



Langeroog sheweth it ſelfe thus when you are about two leagues off from.



Thus sheweth Wrangeroog when it is about two leagues thwart off from you.

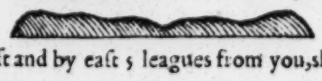
White Cliffe.



Thus sheweth the New-land, or New-worke when you are at the entring of the Elve.



Holyland northeaſt and by eaſt from you sheweth it ſelfe thus.



Holyland northeaſt and by eaſt 5 leagues from you, sheweth it ſelfe thus.

The third Demonſtration,

In which are deciphered the ſea coaſts of the weſt and eaſt ſide of Jutland together with the Belt untill you are paſt Laland and Langheland.

FRom the New-worke, or Steepe-Buye to the Hever, the courſe is North tenne leagues, when you come about halfe wayes betwixt them both, you ſhall meet with the foreſaid ſand or tayle of Blavoort in the depth of two or three fathom. In this fare-way you muſt be very carefull of your tydes, that you come not upon the grounds, which lie far out a ſeaboard the Land, the foreflood falleth there very ſtrongh thwart over the grounds towards the land, and the ebbe to contrary.

For to ſaile from Holyland to the Hever, goe on northeaſt ſomewhat eaſterly, or according as the winde and tide ſhall be, and runne towards the grounds, untill you come in ſix or ſeven fathom, and then you ſhall eſpye a ſteeple which is ſharpe, and indifferent high, called Piel-worme, bring that northeaſt and by north from you, a maſts length to the Southwards of the ſouthermoſt Cow-houſe, upon the little Iland Nuball, keepe that ſo ſtanding, and ſaile towards it, and you ſhall ſo finde the outermoſt buye, from that to the ſecond buy, goe on northeaſt, and northeaſt and by eaſt; being come toit, Piel-worme ſteeple ſhall ſtand Northnortheaſt from you. From the ſecond buye alongſt inwards, the courſe is northeaſt and by eaſt. Being come in ſo a good wayes, you ſhall finde two beacons on the ſtarboard ſide, upon a dry ſand, called the Quade, there over againſt commeth the north balgh in the right Hever. From the firſt beakon to the ſecond and third, the courſe is eaſt and by north, ſayle all alongſt by the beakons, leaving them the ſtarboard ſide. To the northwards of them betwixt the firſt and third beacon, it is full of ſands and plates, where you might at unawares ſaile within. By the third beacon cometh the ſouther Balgh into the Hever. From that third beacon to the two other beacons the courſe is northeaſt and by eaſt, being paſt that you ſhall come by the greene land on the ſtarboard ſide, there it is a ſquare deepe, large and broad channell, from thence you may ſaile alongſt amidſt the channel unto Hoeſen at the bridge, or anckor thereabouts every where, where you will.

Without in the Hever the north ſide is ſteepe, therefore

keepe the ſouth ſide untill you come within the beacons, in the channell is at halfe floud two fathom and a halfe water, and without the channell it is very farre flat. Somewhat without the Hever lyeth alſo a banck, whereof men muſt bee carefull when they will ſayle in there. A ſouth and north Moone maketh there the higheſt water.

The South Balgh goeth in to the ſouthwards of the foreſaid bank the Quade, in right with the little Iland Utto, and alongſt to the northwards of it, it is from without a league and a halfe to ſayle to Utto. From Utto it lyeth in alongſt northeaſt and by north, and commeth out into the Hever by the third beacon.

The north Balgh lyeth in to the northwards of the Hever about eaſt and by north, or weſt and by ſouth from Piel-worme, right in with the foreſaid little Iland Nuball, which you muſt leave on the larboard ſide running in along by it, and ſo come into the Hever, againſt the foreſaid dry ſand, the Quade: you may alſo (comming in at the North Balgh) ſaile up to the northwards from the Iland Nuball unto the end of Strand, till you come thwart of a flat Church, and anckor there behinde the ſhowlds, that is a deepe Balgh or Creek.

Smalle deepe.

Three or foure leagues to the northwards of the Hever, lyeth the Smalle-deep. For to ſaile of from Holyland toward it goe on northeaſt and by north, and runne to the grounds, about weſt and by north, from the Pielworme the ſouth end of Ameren ſhall then bee north or thereabouts from you. Seek then to the ſouth grounds, and ſound about by them, and there you can not doe amiſſe, it is flat riſing ground farre without the land. On the north ſide lie many ſands, ſhowlds, and poynts, that lie out, which men might (without good heed-taking) ſaile within: ſaile in therefore alongſt by the ſouth ſide north and by eaſt, northnortheaſt, and northeaſt and by north, and ſo you ſhall find one ſhowld or breach, leave that on the larboard ſide. If you leave that on the ſtarboard ſide, you ſhould runne into a dead Balgh or creek, wherein is at the firſt at leaſt 7 fathom depth, but runneth at laſt by little and little to nothing: you may alſo runne alongſt by that foreſaid ſhowld by your lead, untill you come within it, comming then thwart of the ſouth end of Ameren, you might unawares ſaile within the ſouth grounds behinde a ſhore which ſhooteth of from the grounds of Vooren, therefore keepe the ſouth ſide untill that you come thwart of the Iland Vooren.

The Red-deepe.

For to ſaile in at the Red or Silter-deepe, comming from the northwards, or out of te ſea, runne in ſight of the Iland Ameren. About the middeſt of Ameren lieth a white round hil, a little higher then the other Hommocks in a low plaine valley. Bring that northeaſt from you, and run in ſo right with it, untill you come within the riffe that ſhooteth off from the Voortrap, and commonly is called Ameren Borne, and ſo you can not take any hurt of it, and then you ſhall have upon the point of the Riffe not leſſe then three fathom water, and within the ſame riffe eleven, twelve, or thirteene fathom. Saile ſo in untill that the north end of Ameren be north and by eaſt from you, and then run right with the north end of Ameren, untill you come within the dry ſand, and there you may ankor where you pleaſe, or faile ſo farre in as you will, and found it all alongſt by the Riffe. The Strand of Ameren is a faire Strand without any tailes that men might ſaile within. When the foreſaid hill upon Ameren is eaſtnortheaſt from you, and ſaile ſo right with it then you run to neare the foreſaid Riffe of Silt, the hill is then alſo in two parts, the northermoſt is the the ſmalleſt.

Ameren-Borne.

For to ſaile in at the Red-deepe, or Silter-deepe, comming of from Holyland, and that you have gotten ſight of the land, then bring the north end of Ameren north and by eaſt from you untill that you be come in betwixt Ameren, and the Riffe of Silt, runne then in alongſt by the Strand of Ameren, untill you come about the north point of Ameren and ſo along to the eaſtwards, untill that Ameren lye ſouth and ſouthſouthweſt from you. You may not ſayle into this channell further to the eaſtwards, for then you come againſt the Iland of Vooren, but you may ſayle to the northwards alongſt betwixt Vooren and Silt, till you come before Lit. In Silter-deepe is upon the ſhowldeſt three fathom water, being over it, there is againe eight, nine, tenne, and twelve fathom, there lye two riffes, or bad ſand, the one about weſtſouthweſt from Ameren, dry above water, that is, very farre flat, to wit, in three, foure, or five fathom, it is called of the Juthes the Borne, or Ameren-Borne, although that it be not faſt to Ameren, for the Red-deep goeth in betwixt them both. It is not alſo faſt unto the Voortraps, or that ſouth end of Silt, although it commeth ſhooting off from it, betwixt them goeth out into ſea a deepe of about a fathom & a halfe, where the fiſhermen doe dayly goe out through for to fiſh, eſpecially thoſe of the Iland Vooren, this the outermoſt ſand that lyeth on this coaſt. They that uſe this coaſt much, either for Rypen, or the quarters thereabouts are very much afraid for this Ameren-Borne, when they come from Holyland, they finde this ſhowld about weſtſouthweſt from Ameren.

The other ſand ſhooteth of from the ſouth end of Ameren, lying about ſouth, and ſouth and by weſt into ſea alongſt the Land, that is alſo called by many the Borne, or Ameren-Born. He that commeth of from Holyland, & is bound to the northwards, need not feare ſo much for the ſhowld, for it ſhooteth out moſt by the land.

The Haven of Liſt.

About eight leagues to the northwards of Silter-deepe lieth the Haven of Liſt, which runneth in by the north end of the Iland Silt. For to ſayle in there, comming from the ſouthwards, runne ſo long to the northwards in ſix or ſeven fathom, that you may ſee a little Iland without the poynt (which lyeth within theſe outer Ilands) upon which ſtandeth a houſe, called Keurtmans houſe: when that houſe commeth a maſt length without the poynt of Liſt, then goe in eaſt and by ſouth, and eaſtſoutheaſt, keepe thoſe markes ſo ſtanding untill that you be within the point of Liſt, edge then up to the ſouthwards about the poynt, and anckor before the Vuchts houſe, there it is nine and ten fathom deep. At the entring of the channell lyeth a plate or ſand, called Haef-ſand, that you ſhall leave on the larboard ſide, when you come in, it is in the off-ſide very flat, and good for to ſound when you come from the northwards. For to avoyd that when you come from the northwards, edge of ſo far from the ſhore, that the red Cliffe come without the ſandhils, or that you may ſee it plainely: Then you may goe well over Haef-ſand, with a ſhip that is not of a very great draught Likewiſe when you come out at the channell of Liſt, and are bound to the northwards, ſayle ſo farre out that you may ſee the Cliffe, and then you may goe over the foreſaid ſand, which lyeth from the ſouth end of Rem a good wayes into ſea. Haefſand.

On the ſouth ſide of the channell of Liſt lye alſo two ſands or bancks alongſt the ſhoare not very farre without the ſtrand, the innermoſt or northermoſt is called Barling-ſand and the outermoſt, Ruſt, or Ruſting, that lyeth to the ſouthwards almoſt thwart of the red Cliffe, betwixt theſe ſands, and the ſtrand of Silt goeth in the Land deep. For to ſail in there comming from the ſouthwards, you muſt ſeeck betimes to the ſtrand of Liſt about the red cliffe, becauſe of the Ruſt which lyeth of from the northend of Liſt a little without the ſtraud. When that you have the ſounding of the ſhore, and are come ſomwhat within that red cliff, there ſhall meet you a flat from the ſhore, which you muſt ſomewhat avoid, and then you may ſound very well: keep all alongſt the foot ſtrand, there you can take no hurt of it. From the Inner poynt of Liſt ſhooteth off alſo a little riffe, where of you muſt take heed. When that you are come within the Innermoſt poynt of Liſt, then you may anckor where you pleaſe. If you will goe to Lutke Tonderen, then leave that ſand (which lyeth to the ſouthwards of Iure-ſand) on the ſtarboard ſide, and runne through betwixt them both. He that is bound to Hoeſem or Silt over the Wad muſt leave that ſand on the larboard ſide. Upon Vooren ſtand two or the threes, theſe you muſt keepe over the weſtermoſt church or ſteeple, and run ſo alongſt unto Vooren. Barling-ſand. Ruſt, or Ruſting.

Betwixt the Ruſt and Barling-ſand goeth a faire deep channell through called the New deepe, right in alongſt to the ſouthwardes of Rock-ſand, that is a ſhowld which lyeth to ſeawards of Ruſt and Barling-ſand. For to ſaile in at that New-deepe, bring the white cliffe upon Silt eaſt, and eaſt and by north from you and run in ſo right with it, and you ſhall fall right in the New-deep betwixt theſe two banckes, leaving Roocksand or the Maber on the larboard ſide of you, run in ſo alongſt by Ruſt, but come alſo no neerer to it then in foure fathom, untill that you come into the Land-deep, but comming againſt the ſhoare, and getting ſhowlding of the ſtrand, run in alongſt by the foot-ſtrand on inwardes, as is rehearſed in the deſcription of the Land-deep. Rockſand.

Betwixt Haef-ſand, or Haes-ſand, and the Iland of Rem goeth in yet a little Land deep of about a fathom and a halfe water. The Iland Rem is three leagues long, and very flat on the off ſide, ſo that you ſhall ſcarce ſee that land in ſixe or ſeven fathom.

About

Banck of at ſea.

About eight or nine leagues a ſeaboard of the Iland Silt lyeth another banck a long the ſhoare of eight or nine fathom, and is about two leagues long, about ſo long as the Iland is. Betwixt this banck and the Iland it is thirteene fathom deepe, being in nine fathom a ſeaboard the Iland Silt, then lyeth Holyland about ſouth from you.

Knuyts deep, or Riper-deep.

From the channell of Liſt to Knuyts or Ryper-deep the courſe is north and ſouth about ſeven leagues, but Ryper-deepe and Holyland lie north ſomewhat weſterly, and ſouth ſomewhat eaſterly one from the other for to ſaile into Knuyts or Ryper-deep comming from the ſouthwards, run about by the flat of Rem and Manu towards the ſouth end of Phanu, called Souther head, or Souther-heigh and ſo you ſhall ſee two capes upon a drye ſand, ſomewhat to the ſouthwards of Souther-head; bring thoſe capes a little through one another, to wit the innermoſt or longſt a litle or a handſpikes length to the northwards of the ſhorteſt or outermoſt, and then they ſhall ſtand eaſtnortheaſt from you, keep them ſo ſtanding, and ſaile right in with them, and ſo you ſhall finde the outermoſt buye, lying on the north ſhoare in foure fathom in the channell, called Old Ruperdeepe, leave that buye on the larboard ſide, and then goe inwards eaſt and by north, eaſt, and eaſt and by ſouth unto the ſecond buye, you muſt runne alſo about to the ſouthwards of it, for thwart of it commeth a ſhowld ſhooting off from the north ſhoare, from the outermoſt cape towardes the ſecond buye, which you muſt avoid.

Coerſand.

Or keepe the ſounding of the ſouth ſhoare called Coerſand, and run by your lead firſt eaſt and by north, then eaſt, and at laſt eaſt and by ſouth in by it, you ſhall finde there upon the ſhowldeſt not leſſe then ten foot at low water, and common tyde; there within it is again 6, 7 and 8 fathom deepe. Being paſt the capes, then luffe up to the northwards, about the ſand where the capes ſtand upon, and anckor there where you pleaſe, there it is wide and broad, and alſo deep and ſteepe, ſo that there you can take no hurt. The Ryper ſhips that are bound out, doe lye there for to ſtay for a winde. Behinde the Iland Manu it is 6 and 7 fathom deepe, there alſo men may ride, from thence you may goup the deep to Rypen, but not up along to Rype with great ſhips, cloſe to Rypen the deep endeth, ſo that there is a ſhowld neck betwixt both, where there is no more then 6 foot depth. With ſmal ſhips you may alſo ſaile about be hind Rem towards Jurſand, there is a low water about 7 foot water.

Comming from the northwards for to ſail into Ryperdeepe, you ſhall alſo runne on to the ſouth end of Phanu, untill that you ſhall eſpye the foreſayd capes, and doe then further as is above taught. This channel is not the beſt channel in foule weather, for it is narrow and farre off ſhould without it: but when you ſhall be entred into it, you may eaſily ſee both ſides breack, if it blow any thing hard.

A ſouthſouthweſt and northnortheaſt moon maketh here the higheſt water.

The Grouwe-deepe.

About northeaſt, or northeaſt and by north from the north end of Phanu lyeth a little Hill, called Luysbergh: a little to the northwards of it lyeth a long plaine ſand-hil, called Langeleg: from thence lyeth the land towards Zuyder-zyt weſtnorthweſt and eaſtſoutheaſt.

Langeleg.

Betwixt the north point of Phanu and Langeleg goeth in that Grouwe-deep. For to ſail in there when you come from the ſouthwards, run alongſt the Iland Phanu, and about by the north end of it (which is farre flat.) When as that you get deeper water, you ſhall ſee three or four hommocks about northeaſt from you, upon the high land with a little flat ſteeple, called Holm, or Bruynum Bring that little church a cables length to the northwards of the Hommocks, goe in then northeaſt, and keep the ſouth ſhore, until you come within that dry ſand, which ſhooteth off from Phanu, called Smeurſand, you may run to that upon your ſight without doing amiſſe, but leave that on the ſtarboard ſide when you come in. The ſhores are there abouts both of the very ſteepe, as well Wiſdike, (that is the Plate which lyeth in the channel) as alſo Smeurſand, but without the ſhoares are flat. When you are paſt the point of Smeurſand, edge then over to Wiſdike, and anckor there untill that you have the loweſt watet, and then you may ſaile to Hartingen, and go on foot to Wardt, or Woerdt, which lyeth eight or nine leagues within the land, the river is very croocken; upon the which here and there lyeth a Gentlemans houſe.

Smeurſand.

Wardt.

A ſouthſouthweſt and northnortheaſt moon maketh there the higheſt water, and there it flouweth with a common tyde about a fathom up and down.

From Phanu to Schellingkroegh it is four leagues, betwixt them lyeth Zuyder-zyt a little river of eight or nine foot water. The land betwixt Langelegh and Zuyder-zyt is ragged land with ſand-hilles, and rough, being grown with ſpirie graſſe, or heath. If you ſhould fall with the land at Zuyder-zyt, and that you could not lead it into the channell, then chooſe the land of Langelegh, you may run to it without danger, keepe in two fathom and a halfe, & you can not ſaile amiſſe of this Kroeg: four you may ſound this land al alongſt in 2 fathom and an halfe off from Langelegh untill you come within Schelling-kroeg, but if you run in three fathom, or three fathom and a halve, you ſhall ſaile without the drie ſand, & run about a ſeaboard of the forenamed Kroegh. Schelling-kroeg lyeth in moſt N. W. men lie there within, ſheltred for all winds, like as men doe lie at Coningſborough in the Kettell. If ſo bee that you come from the northwards, and are bound into this Haven or Kroegh, you may run about by that drie ſand in three fathom, when you come by the innermoſt poynt of that drie ſand, there ſhooteth off a little taile of ſand, but you may ſee it weel, and keepe your ſelfe from it: when you come to the eaſt end of that ſand, luffe up about it, untill you come into that Kroegh, and anckor there in two fathom and a foot, it is there very wide, you may make there a good board, and turne it in to windwards. A ſouthſouthweſt and northnortheaſt moone maketh there the higheſt water, the farther you come to the northwards to Iutland, the leſſe tide goeth, and the leſſe it floweth up and downe.

Schellingkroegh.

Suyderzyt.

At the north end of the foreſaid drie ſand lyeth the Dodenbergh, that is a ſhort hommock of a ſand-hill, which lyeth alone. When you are ſomwhat of from it, then it lyeth under the other land, that you can not ſee it, when you come from the ſouthwards or the northwards you may ſee it. From the Dodenbergh unto that ſouth end of the drie ſand, it is all alongſt a faire ſtrand, and flat ground. For to ride under the drie ſand, you may ſound about it comming from the northwards, and get ſmooth water for a northweſt wind, and alſo for weſterly windes.

Doodenbergh.

A little to the northwards of the Dodenbergh lyeth the poynte called the Horne betwixt Zuyderzijt and Weſterzijt making there a Horn of the land: to the ſouthwards of it the Coaſt lyeth eaſtſoutheaſt and weſtnorthweſt towardes the Growe-deepe: to the northwards of it north, and ſouth towardes Weſterzijd is a village lying betwixt the blawenbergh and the Horne.

About this poynte or Horne runneth off a long banck aboute twelve leagues weſtſouthweſt into ſea, called Reefshorne, or as ſome do name it Devillhorne, which lyeth at ſome places altogether drye, eſpecially ſeven or eight leagues from the ſhoare, where it is not deeper then two fathome and a halfe, or three fathom a foote leſſe. A ſhippe that ſayleth upon it, men can but even ſee it from the land it is at the deepeſt by the land, to weete four fathome lacking a foot. He that commeth there from the northwards with a ſhip of a great draught, muſt take verie good heede, for it is upon, the northweſt ſide of ſteepe, that men ſhall have one caſte two and twentie, the next caſt fifteene, and the third caſt no more then three fathome.

Reefshorne.

When you fall with the land with weſterzjidt or to the northwards of Reefſhorne, you may ſound alongſt by the ſhoar in ſixe or ſeven fathom, untill you come neare the foreſayde Horne: you ſhall then alſo finde another ſhowld Riffe, that runneth of from the land, called the Owle, which is alſo verie ſteepe on the north ſide: from the northwards you may not come nearer it, then in ſeven fathome. A little to the ſouthwardes of it beginneth Reefſhorne to runne of from the ſhoare, it is there a narrowe banck, you ſhall not finde there leſſe then three fathome, or three fathome lacking a foot water, at two or three caſt, according as it ſhall blowe hard or ſoft, and that you ſhall make your waye, and then you ſhall gette preſently againe five fathome, and ſound it about by that ſhoulde ſand, whether you deſire to be.

The Owle.

According to the opinien of ſome, Doggers-ſand beginneth from this banck. When men ſette ſayle earlie in the morning out of Rinkoppers deepe, with a ſouthweſt waye, and a good northeaſt winde then they are aboute four of the clock in the afternoone yet in nine fathome: whereby it ſhowld appeare, that Doggers Sand ſhowld have his beginning at this banck.

For to knowne the land hereaboutes: Aboute four leagues to the northwardes of the foreſayd Horne lyeth a high hill a little from the ſtrande, called the Blawenberg, going playn downe on both ſides, which is ſomewhat blacker then the othes

other land, being grown with ſpyrie graſſe, to the ſouthwards of this Blawebergh lyeth that fiſhers village Weſterzijd betwixt that village and the Horne lyeth one black hommock, and alſo a Gentlemans houſe, otherwiſe the land is altogether full of hommocks.

Rinkopper deepe.

To the northwards of the foreſaid Blawenbergh lye three or four lowe white Sandhilles, and by the haven of Numen alſo two great white Sandhilles cloſe one by the other. To the northwardes of theſe Sandhilles runneth in that Haven of Numen, the land lyeth betwixt the Haven of Numen and the Doodenbergh, moſt ſouth and north about ſeven leagues, all alongſt a faire ſtrand the beſt to beknowne of this coaſt, is the foreſayd Blawebergh, and theſe two foreſayd white Sandhilles.

Rinkopper deepe. For to ſaile into Rinkopperdeep or the Haven of Numen runne alongſt by the land of Weſt-zyd, in ſixe or ſeven fathome, untill that you come to the two foreſayd great white Sandhilles, and then you ſhall ſee upon a lowne land two capes, upon each of them ſtandeth a barrell: Bringe them one in the other, and then they ſhall ſtand north, or north and by eaſt from you, ſaile in right with them, and you ſhall finde a buye, except it be laide ſomewhere els. Right before the haven of Numen lieth a Sandplate, named Gladde Iaep. For to ſaile into the ſouther channell, then leave that plate on the larboard ſide, and run in cloſe by the ſouth ſhoare or foot ſtrand (where the aforeſayd white Sandhilles doe lye upon) right with the Capes, and there you can not doe amiſſe, but runne in boldly by it upon your lead, that is the verie ſureſt waye of all to ſayll in alongſt by the ſtrand, when men are carefull of the lead.

Gladde-Iaep.

Being paſt Gladde-Iaep, runne then towards the north ſhoare, you may ſayle about by it ſo cloſe as you will, it is a lowe plaine poynte, altogether cleane and verie ſteepe. When you are come within this poynt, you may anckor where you pleaſe. This channell lyeth in moſt north and north and by eaſt, untill you come within Gladde Iaep, and then ſomewhat more eaſterlie towards the foreſayd poynt. In this channell goeth an indifferent ſtrong tyde, becauſe there lyeth ſuch a great Sound within. It floweth there a litle up and downe, no more then two foot and a halfe, with a common tyde. A ſouthweſt and northeaſt Moone maketh there the higheſt Water. Right to the northwardes of Gladde Iaep runneth in another channell, but there is no more but eight foot water.

Further within the Haven of Numen it is Pilots water, but ſhippes that are not of greate draught may well ſaile up, eſpecially at a lowe water. The deepe runneth alongſt by the ſtrand of Numits, keeping alongſt by it you can not doe amiſſe: ſo ſoone as you goe off from it, you ſhall be in daunger to ſayle within the ſhares or tayles which lye off from the Wadt towardes the land of Numit, therefore runne cloſe alongſt by the foreſayd ſtrand of Numit ſo long, untill that little church with a flatte ſteeple (about eaſt from you againſt the high land of the Holme) come the ſouth ſide of the high land: then you are within the tayles and ſands that lye out, leave then the ſtrande, and goe in northnortheaſt, and northeaſt and by north, untill that a rounde hommock come cloſe to the ſouthwardes, or right over a little blew church upon the high land of the Holme. Goe then in alongſt northeaſt and by eaſt untill that the foreſayde little blewe church commeth over a Gentlemans houſe, beneath in the lowe land, cloſe to the water. Sayle then on north, and by little and little north and by eaſt, untill you come before Rinkoppen, it is there broade, large and wide, and the right deep two fathome and two foote.

Rinkoppen and the havens mouth of Numen lye foure leagues aſunder one from the other.

To the northwardes of Rinkoppen goeth a little river into the land, upon which lye two little townes, ſeven or eight leagues in the land, the one named Hoſtebro and the other Huyſbuy.

A halfe league to the ſouthwards of Boevenbergen goeth in yet another little haven inwardes out of the ſea, named Troſmone, there ſtand two maſtes, you muſt keepe them one in the other, and runne ſo into it: there lyeth a little village within called Troſmonde. From thence you may ſayle over the Wadt to Rinkoppen.

This little haven is not to be reckoned for a Haven becauſe ſometimes it is caſt too, and ſometimes there may goe in and out againe Boates or Crayers and ſmall ſhippes.

From Rinkopper Deepe or the Haven of Numen to Boevenbergen the land lyeth moſt north and ſouth tenne leagues, there is all alongſt betwixt them both a faire ſtrand with wite ſandhilles, growne with ſpyrie graſſe.

When you ſayle alongſt by it, you may ſee the blewe double land of Rinkoppen, (called the Holmes) alongſt over this land.

Betwixt Boevenbergen and the Reefhorne lye ſome bancks of ſeven, eight and nine fathom, and alſo ſome that are deeper.

Boevenbergen. Boevenbergh is a long ſmooth hill, having in the middeſt a high round hommock or hill, and upon that hill ſtandeth a church with a ſteeple: when you come thwards to land with Boevenbergen: it ſheweth it ſelfe in three hilles, the middlemoſt is the higheſt, upon which ſtandeth the foreſayd church, with a flat ſteeple: upon both ſides of that hill ſtand alſo other churches, but they are not ſo high: you may ſee the land in thirteene and fourteene fathome, the ground is groſſe red ſand with ſome little ſtones therein.

When Boevenbergen is eaſtnortheaſt from you, it ſheweth it ſelf in a long hill, with ſome dale in the middeſt on the north ſide, with a church, and alſo a church on the ſouth ſide, and alſo another hill to the northwards of it.

From Boevenbergen to the Holmes the land lyeth northnortheaſt nine or tenne leagues, betwixt them it falleth in with a Bight, it is black land with hommocks, and ſandhilles growen with ſpyrie graſſe, here and there ſtandeth a flat ſteeple in the land.

Aboute five leagues from land lyeth a bancke of tenne fathome, but it laſteth not long before you get againe deeper water.

The riffe. Betwixt Boevenbergen and the Holmes lyeth the great Iutiſh Riffe weſt into ſea, running over it in twelve or thirteene fathome, then lyeth the Naze from you, northweſt and by north 24 leagues, running over it in ſeventeen or eighteene fathome, you may ſee the land, on the north ſide it is groſſe ſand, on the ſouth ſide ſtonie like as peaſe and beanes.

Weſtnorthweſt from Boevenbergen about eight leagues it is ſixteen fathom deep, groſſe ſtonie ſand ground: ten leagues from the land it is twentie fathome deep groſſe ſtonie land, like to peaſe.

Southweſt and by weſt from Boevenbergen about nine leagues, it is 25 fathom deep, redde and black ſand ground that is the ground of Doggers ſand.

Holmes. The Holmes is a plain pointe, going downe ſteepe on the northeaſt ſide upon the middel of the hill ſtandeth a ſquare church without a ſteeple. When that higheſt of the land is ſouthſoutheaſt from you, and that you can but even ſee the north end of, it then it is fifteen fathom deep, groſſe roug ſand, with ſome little ſtones amongſt it.

Two leagues northeaſt, or as ſome ſay, ſomewhat more eaſterly, off from the north pointe of the Holmes: to wit, betwixt the north poynte and the Holmes, and the eaſter pointe, lyeth a ſtonebanck (in manner as the Trindell of Leſolde) upon which there is no more then twelve foot water, ſo that there remaineth about two third parts of the water betwixt that Stonebanck and the north poynt, and the other third parte betwixt the Eaſter poynte and the aforeſaid Stonebanck: there have divers ſhippes beene loſt upon it. The foreſaid Eaſter poynte lyeth about four leagues to the eaſtwards of the Holmes, and is alſo a high ſteepe poynt, as if it were the Holmes. Right thwart of this eaſter pointe ſhooteth off a riffe almoſt a league off into ſea, which you may ſound about in ſeven fathom. Some ſay, that men may ſayl through betwixt that riffe and the land.

From the Holmes to Robſnot or Robbeknuyt the courſe is northeaſt nine leagues.

A little to the weſtwards of Robſnot in the bight towards the eaſter poynt, neareſt to Robſnot ſtand five churches with flat ſteeples. There lye alſo two blewe lands betwix the eaſter poynt and Robſnot, in the high, you may ſee alſo a cloven hill or ſand-hill before you come to Robſnot. It is there all alongſt a flat ſtrand.

To the eaſtwardes of the Holmes goeth in a little river called Miſdorp.

A little to the weſtwards of that white cliffe or of Robſnot goeth in alſo a little River, whereupon lyeth a little towne called Werlom.

Robſnot. Robſnot or Robbeknuyt is a high round hill, upon the toppe where of ſtandeth a church with a ſharpe ſteeple. The land falleth away to the eaſtwards from this poynt, with a great bight towards Hartſhals.

Thwart of Robſnot is farre off flatte, fifteene fathom depth is almoſt three leagues from the ſhore.

There alſo thwart of Robſnot about foure leagues from the ſhore lyeth a banck of nine fathome, lying alongſt the ſhore.

Thwarte of Robſnot lyeth alſo a rock about a league from the land.

Hartſhals From Robſnot to Hartſhals it is northeaſt and by eaſt four leagues,

leagues there ſtandeth a flat ſteeple betwixt both neareſt to Robſnot, there you may ſee the high land of Lackley, alongſt over that high land.

Hartſhals is a long ſmoot hill, which is at the eaſt end ſomewhat ſteep.

Thwart of Hartſhals lyeth a ſhowlde or ſtony ground, about an Engliſh mile the ſhoare, upon which (as men ſaye) there have beene ſhippes loſt, but men doe ſeldome come neare it.

The Scawe. From Hartſhals to the Scawe or Scagen the courſe is eaſt-northeaſt eight leagues.

The land to the eaſtwards of Hartſhals is altogether full of hommocks and ſand-hilles, you may ſee the high land of Lackley alſo alongſt over this land. Alongſt theſe coaſtes men finde none ſuch long plaine hilles, as are Boevenbergen the Holmes, Hartſhals and Robſnot.

Somewhat within the poynt of the Scawe ſtandeth a flat Church with a flat ſteeple, called Old Schagen, when that is ſouthſoutheaſt from you, then there runneth of from the ſhoare, a little ſpitte or ſhowld, there you muſt edge ſomewhat off from the ſhoare, otherwiſe it is all alongſt a ſteep ſtrand betwixt Hartſhals and the Scawe, but you may ſounde about this little ſand in four and five fathom, ſo neare as you will.

Upon the eaſt end or outermoſt poynt of the Scawe ſtandeth, a fire-beakon like a Cape too ſee too: when the Church is ſouthweſt and by weſt from you, then are the fire beakon and the ſteeple one in the other, and then you are right thwart of the riffe of the Scawe, which lyeth off from the poynt eaſt-northeaſt, and eaſt and by north almoſt a league into ſea.

He that commeth from the weſtwards, and will ſayle alongſt by the land, about the Riffe, muſt eſpecially by verie carefull in uſing the lead, he may take the ſounding of the ſhore ſo neare as he will accordingh as the winde ſhall be, in eight, ſeven, ſixe, five, four, and alſo well in three fathome, without doing amiſſe, he neede not to feare: If he be but carefull in uſing his lead, with a ſouthweſt winde, he may ſayl about in three or four fathome.

When the fire beakon commeth to the eaſt ſide of the houſes of the Scawe, then you come againſt the weſt ſide of the Riffe, when the firebeakon and the Church are one in the other, then you are on the eaſt ſide of the Riffe.

When the firebeakon commeth about halfe wayes the houſes, neareſt the weſt ſide, then you are right upon the poynt of the Riffe, what depth that you have then you ſhall keep it ſtil, without finding it ſhowlder, wheter you ſaile alongſt ſoutheaſt or northweſt.

He that commeth from the ſouthwards, and is bound about the Scaw to the weſtwards may not ſound the Riffe becauſe the ſouth ſide of it is ſteepe and needle to, it is not good to come nearer to it then in twelve, thirteen, or fourteen fathom, eſpecially by night or darke wether.

Marcks of the Scawe riffe. For to knowne by certaine markes, when you are cleare of this Riffe, as well over the one ſide as the other, then marke, comming from the weſtwards, when the old church and the firebeakon are one in the other, then you come upon the weſt-ſide of the Riffe: comming from the ſouthwardes or the eaſtwardes, when the old Church commeth in the ſouth end of the village, then you come upon the ſouth ſide of the Riffe. When the ſteeple and firebeacon are ſouthweſt & by weſt from you, then they are one in the other, and then you are thwart of that Riffe. When the ſteeple is ſouthweſt and ſouthweſt and by ſouth from you, then you are without, or to the weſtwardes of that Riffe: when the ſteeple or firebeakon is weſtſouthweſt and by ſouth from you, then you are within the Riffe. This you may ſet by night, by the compaſſe, and ſo may perceine, wether you be within or without that riffe, when the Firemaker doth fire well. You may anckor on both ſides of the Riffe in ſeven or eight fathom, and have roome enough to ſet ſaele. Some alſo ſay, that men may runne through betwixt the riffe and the land (If neede require) in two fathom and a half.

Tides out of the Belt. Betwixt the Scawe and Maelſtrand or Norwaye it is all ſoft ground, the nearer to Norway the deeper water. When men come out of the Sound, & are in the farewaie, and can gettet no ground in eighteen, twentie, & two and twentie fathom, that is a ſigne that they are about the riffe of the Scawe.

When you come about the Scawe from the weſtwardes, and are bound to the Sound or the Belt you muſt take, an eſpeciall care of the tyde that commeth out of the Belt which falleth commonly out of the Belt towardes Norwaye, eſpecially when the winde hath blown a while eaſt or northeaſt, it can carrie a ſhipp by night or darke wether under Norwaye, before you ſhould thinke of it, it did happen in the yeare 1605, the three and twentieth of may that a ſhipp comming thwart of the riffe of the Scawe, ſo that the riffe did lye ſouthweſt from her, did driven with calmes in eight houres, untill ſhee came within three leagues neare to the land of northeaſt, about Harmenshooft five leagues to the weſtwards of Maelſtrand, ſo great and ſtrong current there did ſhoote alongſt by the riffe towards the northeaſt, al through it doth ſeldome happen, that the tyde doth run there ſo ſtrong out, yet nevertheleſſe it behooveth men to be verie carefull, to conſider there of, and to reckon there upon.

From the Scaw, to Seabuye the courſe is ſouth and by weſt ſixe leagues, there it is upon the road four and five fathom deep. Betwixt the Scaw and Seabuye lye the ſmall Helmes foure leagues from the Scaw, and two leagues to the northwards of Seabuye. When you will ſaile into the Belt, you muſt leave then on the ſtarboard ſide, going on ſtill ſouth and by weſt until thwart of ſeabuy, you may alſo ſaile through betwixt the Helmes and the main land unto ſeabuy, if you will, there is at the ſhowldeſt betwixt them 3 fathom water, but about a ſeaboard the Helmes, betwixt the Helmes and the north end of Leſou, it is foure leagues broad, and in the channell ten fathom deep ſoft ground.

The lying of the Helmes, and how men ſhal come to anckor there, and alſo of all depts, ſhowlds and dwale grounds, betwixt the Helmes, the Scaw, and Leſou, together with the deſcription of the Iland Leſow and the riffes that lye out there about it is deſcribed before.

Betwixt Leſou and Seabuy lye many dwale grounds, which are very uneven of three, foure, five and ſixe fathom the like uneven & ſhowld grounds lye alſo within or to the ſouthwards of ſeabuy, of foure, five and ſixe fathom, but the right channell through betwixt the dwale grounds of Leſou, and the ſhowlds of ſeabuy is ſeven and eight fathom deep.

To the ſouthwards of the ſmall Helms and ſeabuy, neerer to the maine land then Leſou, lye alſo ſome uneven dwale grounds, upon which there is no more water then 10, 11, and at ſome places 12 foot. Hee that draweth but 8 or nine foot need not feare of them.

From ſeabuy to Aelburgher deepe, the courſe is ſouth and by weſt ſeven leagues, upon the north ſide of the haven ſtandeth a flat ſteeple called Hals, in the havens mouth lyeth a buy, and upon the ſouthland ſtand two Capes, which you muſt bring one in the other, by them you ſhall finde the buye, the channell lyeth in firſt weſt and by ſouth, about a cables length, then you muſt run up northweſt and weſt right unto Hals, and run in by the north ſhore, untill thwart of Hals from the ſouth poynt, of the land ſhooteth off a flat which you muſt avoyd: being thwart of Hals you muſt goe ſouthweſt and by weſt unto the bight, and in the crooked channell you muſt ſhun the north ſhore ſomewhat and then againe northweſt and by weſt alongſt by the north ſide, unto the ſecond crooked, and then ſouth-ſouth-weſt and afterwards weſt-ſouth-weſt unto the town, in the comming in by the buye, it is two fathome. But for to ſayle in there, it is beſt to take a Pilot. By the ſouth ſhore goeth in alſo a little deepe of ſix and ſeven foot.

The towne Aelburgh lyeth up in the land foure leagues within the river. Alſo there lyeth alongſt this coaſt to the weſtwards ſome bancks, there you muſt ſhunne the land ſomewhat.

When you ſail from the Helmes to Stevenshead, through betwixt the dwale grounds & the flat of Seabuy, you ſhal meet with a ſhowld ground about half wayes betwixt Stevens-head and Seabuy or 5, 6 and 7 fathom. This ſhowld is called the Swettering, & lyeth about 3 leag. eaſtwards from Aelburgh deep, the channel there betwixt them is about 10 or 12 fathom deep. The Swettering.

From Aelburgh deep to Haſelin, the courſe is ſoutheaſt and by eaſt about 20 leagues.

From Aelburgh deep to Stevenshead the courſe is ſouth-eaſt and by ſouth about nine leagues. There betwixt them the land lyeth in a great Bay, where in lye the two little townes Mariacker & Randerſen: Mariacker lyeth from Aelburgh deep ſouth and ſouth and by weſt 4 leagues, and from Stevenshead, five leagues. Betwixt Mariacker and Stevensbaven lyeth the River of Randerſen, which runneth up crooked farre into the land, unto the little town Schandelburgh. Stevens-head. Mariacker. Randerſen.

From Stevenſhead to Haſelin the courſe is eaſtſoutheaſt 13 leagues. Haſelyn is on the outer ſide full of ſhowlds, riffes, and grounds. A larger deſcription of Haſelyn and Anout as alſo of all the foule grounds and ſhowlds, lying thereabouts, you ſhall finde in the firſt Demonſtration of this book. Haſelin.

A little to the ſouthwardes of Stevenſhead lyeth a little town called Oruntbuy, there lye the Chalck-grounds right before the river of Grimſound in a bay a little about the poynt of Stevenſhead: that is a ſand two or three foot water, but not Oruntbuy. Chalck-Grounds.

but not far of it, it is ten fathom deepe you may ſound them in foure fathom. You may ſaile up in to Grimſound, unto Grimſtee, that is a lading place or Huyes.

Great Helm. From Stevenshead unto the great Helme the courſe is ſouthſouthweſt about ſix leagues. The land lieth from Stevenshead unto the poynt of Ebeltud ſouthſouthweſt ſeven or eight leag. Ebeltud is a little Towne lying within the land thwart of the great Helme. Betwixt the great Helme and Iutland it is ſixe and ſeven fathom deepe. Cloſe by, Stevenſhead, and the poynt of Ebeltud is eight nine, and alſo tenne fathom deepe. The great Helme hath two Riffes, one upon the northeaſt ſide, and the other upon the ſouthweſt ſide.

From Stevenſhead to Siero the courſe is ſouthſoutheaſt 8 leagues, to the northwards of Syero lyeth a ground looſe ſtom the land, divided into two Riffes, which men muſt avoid. Theſe two Riffes lye at ſome places above water.

Wero. From the ſoutheaſt poynt of Syero lyeth off a riffe towards Ruſnes, here you may anckor behind it.

From the great Helme unto the Iland Wero, the courſe is northnorthweſt, and ſouthſoutheaſt foure leagues diſtant, there it is 4 and five fathom deep. From Wero there runneth off a ſhowld unto Kyholm, and about Kyholme: and alſo about the

Kyholme Sampſo. little Iland Samps, it is alſo full of ſhowld grounds, which run off unto the great Iland Sampſo.

From the great Helm unto the Iland Sampſo it is ſouthweſt and northeaſt foure or five leagues.

Samps. From the north end of the Iland Sampſo there ſhooteth off a little riffe north into the ſea, you muſt ſound cloſe about by it for to come into the road of Sampſo, when you will anckor there. It is there in the road tenne fathom deepe, and you ſhall be there under the Swan-grounds ſheltred for all windes.

Aerhuyſen From the ſouth end of Ebeltud to Aerhuyſen the courſe is weſt and by north, and w. northweſt five leagues. It is there all ſhowld water of 2 and 3 fathom deep. He that will ankor in the road before Aerhuyſen, let him bring the great ſteeple in the midſt betwixt the two other ſharp ſteeples, there is the beſt ground, and good road in three, foure, & five fathom, ſo ſhowld as you will. To the ſouthwards of Aerhuyſen goeth in the We-

Weder-ſound. derſound betwixt Iutland and Sampſo: he that will ſayle in there, muſt bee well acquainted, for it is there all full of riffes & ſhowlds. You may not alſo uſe that fareway by night, by reaſon of all the ſands and ſhowlds, and alſo by day you muſt be very carefull and circumſpect in looking out, and not ſpare your lead, but you may ankor & have road there every where.

For to ſail through the VVederſound. When you will ſaile through the Wederſonnd, comming off from the great Helme or Ebeltud, you muſt leave the Iland Tuns and the Swangrounds on the larboard ſide, running all alongſt by the Iuttiſh coaſt in 2, or 3 fathom, untill paſt Horſens, or the Iland Endelau, which you may not ſayle to, not come neare from the weſtwards, by reaſon of all the grounds which lye before it on the weſt ſide. It is a narrow channel betwixt Endelau, and the main land, lying from the Wederſound through the Swan-grounds ſouth, it is on both ſides ſhowld, and but a creek for to ſayle through.

Swanne-grounds. When you come off from the Melverſound and will ſayle through the Wederſound, it is beſt to runne alongſt by the Iuttiſh ſide untill thwart of the river of Horſens, then you muſt edge ſomewhat off there from the land, and ſayle right with the Iland Tons, and ſo you runne through betwixt the Norther and Souther grounds, leaving the Ilands Tons on the ſtarboard ſide. When you are then paſt Tons, you ſhall runne out cloſe by the north poynt of Sampſo, towards the land of Ebeltud, it is altogether one courſe from Horſens to Tons, and forth to Sampſo, and the poynt of Ebeltud, too wit, Northeaſt and ſoutheaſt eight or nine leagues.

Melver-ſound. From Horſens, or that Iland Endelaw unto the Melverſound, the courſe is ſouthſouthweſt 6, or 7, leagues. The Melverſound is a deep ſound of 20, and 25 fathom, very crooked to come into, it goeth in betwixt Fuynen and Iutland; which are both high lands. From the Iland Ebelo unto Melverſound the courſe is S. W. and ſouthweſt by ſouth five great leagues.

Ebelo. From the road of Sampſo to Ebelo the courſe is ſ. ſ. w. and ſouthweſt & by ſouth 5 leagues. From the ſouth end of Sampſo to Ebelo the courſe is ſouthweſt and by weſt foure leagues.

Roems. From Sampſo to Roems the courſe is ſoutheaſt and n. w. 5 leagues. The n. weſt coaſt of Fuynen lyeth ſouthw. and by weſt eight leagues. The little Iland Ebelo lyeth off a league from the ſame, right before Bowens, but you can not ſayle through betwixt the Iland and Fuynen. To the ſouthwards of the Iland lyeth a great rocke under water, betwixt this rock & the Iland

Road before Bowens. is the road before Bouwens in eight and nine fathom.

Betwixt Syro and Wero lyeth a dangerous riffe, long and broad lying further then halfe way to Syro. When you will run through betwixt the two foreſaid Ilands a weather of Ruſſeneſſe, you muſt leave at leaſt the two third parts of the water on the ſide of Wero, & goe in ſouthſouthweſt towards Roems, which is nine leagues diſtant.

Haters riffe. The foreſaid riffe is called Haters riffe, is on the eaſt ſide very hard and ſtony, hee that commeth from Baltſack, he ſhall run cloſe to the Iland Wero, for to avoyd that riffe, the channel betwixt the riffe and Wero is not very broad, and 3 fathom, or three fathom and a halfe deep. He that commeth from Roems or Ruſnes, and will ſaile through Wero ſound, let him bring the great Helm to the eaſt ſide of Wero, and keep them ſo ſtanding ſailing on ſo right with them, he ſhall (ſo doing) take no hurt of Haters riffe. Betwixt Syro and Haters riffe and ſomwhat more ſouthwardly, the ground is very uneven of 5, 6, 7, 8, and nine fathom. On the ſouthſide of Haters riffe it is good anckoring for northerly winds in 6, and 7 fathom.

Ruſnes and Syro lye northnortheaſt and ſouthſouthweſt about foure leagues aſunder.

From the poynt of Ruſnes runneth of a little riffe to ſeawards but to the eaſtwards of it betwixt Ruſnes and Haſelyn, lyeth off a riffe at leaſt two leagues into ſea, which lyeth dry at the ende, and by it, it is very ſteep, cloſe alongſt by the end it is eight fathom deep.

Callen-burgh. From Ruſnes to Spro it is ſouth and by eaſt eight or nine league. Betwixt Ruſnes and Spro lyeth Callenburgh, which is alſo a lade place, and about 2 leagues to the ſouthwards of Callenburch lyeth a flat alongſt the coaſt about a league from the ſhore of 5 fathom depth.

From the eaſt end of Spro runneth of a little riffe or ledge of rocks, and over againſt it commeth alſo a flat ſhooting of from the land, betwixt them both it is 4 and 5 fathom deep. But behinde or thwart of Spro lyeth Caſſeur, a faire Havē, where men doe lie at the Kay, and let their goods be carried into the ſhips.

Caſſeur. From Spro to Langeland the courſe is ſoutheaſt, & by ſouth foure leagues diſtant. He that commeth alongſt to the eaſtwards of Wero, through the channel betwixt Wero and Haters riffe, and will ſaile to Roems, let him go on due ſouth and by eaſt, and then he ſhall runne alongſt about an Engliſh mile to the eaſtwards of the Boltſack, and fall with the land a little to the eaſtwards of Roems: likewiſe hee that goeth from Roems, or a little to the eaſtwards of it, on north and by weſt, hee ſhall fall betwixt Wero and Haters riffe right in the fareway. Betwixt Roems and Fuynen you may run thorow in two fathom, but with great ſhips you can not goe through there.

From the north end of Fuynen ſhooteth of a litle riffe about an Engliſh mile into ſea. About a league eaſt and by north from Roems lyeth a ſhowld of 3, 4, and five fathom, which is ſteep, and ſhowldeth up ſo ſuddenly, that a man, not knowing of it, and findeth it ſo by the lead, ſhould bee affrighted at it. To the ſouthwards of Roems, in the land of Fuynen lyeth a little

Carte-monde. towne, for to lade, called Cartemonde. The Haven goeth in from the eaſtwards, and it is ſhowld on the weſt ſide, there lye no buyes in the Havens mouth, there is no more water then 5, ſix, or ſometimes ſeven foot.

Spro. From Roems to Spro, or Knuytſhead, the courſe is ſouth and by eaſt, and ſouthſoutheaſt 5 leagues. Betwixt Spro and Knuytſhead it is 12, and 13 fathom deep. But betwixt Roems and Spro, it is 10, and 11, fathom deep.

Nyburgh. Even about to the ſouthwards of the poynt of Knuytſhead in Buyen lyeth the Haven of Nyburgh, when you are about the poynt you runne right up to the towne, about northweſt, a league there it is ſix and ſeven fathom deep. Men doe lye there with ſhips to the Kay, and let their goods bee carried in what they will.

From Knuytſhead to Langeland the courſe is ſoutheaſt 4 leagues, and then you leave Spro lying on the ſtarboard ſide. From the ſouthweſt end of Spro ſhooteth of a little riffe which

The Friſſell. you muſt avoyd. At the north end of Langeland lye the little Ilands of the Friſſell, which are round about very foule. From Knuytſhead to the Iland Taſſing the courſe is ſouth foure leagues and then you leave the Friſſel lying on the larboard ſide, and run through betwixt the Friſſell and Fuynen. If you be bound to Swineburgh, then go from

Swinburg. the Friſſell to the ſoutheaſt end of Fuynen, on ſouthſouthweſt, and you ſhall meet a little Iland which you may runne about on both ſides of it. Through betwixt Taſſing and that little Iland, or you may run alongſt by the land of Fuynen, untill that you come to the little Towne of Swineburgh,

Olmes. which lyeth over againſt the Iland of Taſſing. Over againſt the poynt of Fuynen lyeth a little Iland called Olms, then you muſt goe up to the weſtwards. You may alſo runne about on the other ſide of Taſſing, and leave the Iland Arr with the foule grounds (which lye betwixt Arr and the ſouth-

eaſt

eaſt end of Fuynen) on the larboard ſide of you, it is not deeper upon theſe grounds then 6 foot. Now as that you ſhal come by the litle Iland Olms, or by the ſoutheaſt poynt of Fuynen, then you muſt (as before is ſaid) goe up to the weſtwards about the poynt of Fuynen towards Woburgh. Upon the ſouth ſide of theſe foreſayd grounds goeth alſo a Deepe through, weſt, and weſt and by ſouth through betwixt the grounds and the Iland Arr: upon this Iland Arr lyeth a little Towne called Koping.

Koping. This foule ground is three leagues long, and that Iland Arr is alſo three leagues long, they lye both of them eaſt and weſt, and the Munk Iland lyeth at the end of theſe grounds before Woburgh in Fuynen, which hath two riffes, the one ſhooteth off from the ſoutheaſt end eaſt into ſea, the other from the north point northeaſt into the ſea. When you ſayle through to the northwards of theſe grounds, to wit, betwixt Fuynen and theſe grounds, towards Woburgh, you ſhall alſo meet with the foreſayd Munk, with another little Iland or two more, leave them lying on the larboard ſide, and run all along by the land of Fuynen, about weſt and weſt and by north unto the poynt of

Askens. Askens, which is about five leagues diſtant from the ſoutheaſt poynt.

Little Iland Areu and Toreu. From the eaſt poynt of Askens unto the little Ilands Toreu and Areu, the courſe is weſt and by north, and weſtnorthweſt two leagues, theſe two littſe Ilands lye one over againſt the other, the one on the ſide of Iutland, and the other on the ſide of Fuynen men runne through there betwixt two riffs which run off one againſt the other, it is there 4 and 5 fathom deep.

Sound of Hadderſleu. Too the northwards or weſtwards of Areu lyeth the Sound of Hadderſleu, which lyeth in about weſt and by ſouth, upon it lyeth the towne Hadderſleu two leagues within the land.

From Areu or Toreu to Melverſound the courſe is n. n. w.

Sound off Coldingé. 5 leagues, which you muſt run into from the ſouthwards firſt weſtward: unto the ſound of Coldingen, being a broad Sound, which goeth a league into the land, if you will goe through the Melverſound, you muſt leave it on the larboard ſide, and goe up to the eaſtwards unto the towne of Melver, where you come then againe into a crooked channell. The Melverſound goeth out to the northwards with a very crooked channell, and you come out a gaine upon the broad water to the northwards of Fuynen, as is before ſaid. You may alſo ſail off from Areu into

Apenrade. the ſound of Aelſem alongſt ſouthſouthweſt unto Apenrade, and then about behind the Iland of Aelſems untill you come into the ſound of Flesburg.

The Melverſound and the little Iland Areu lye ſouthſouth-eaſt and northnorthweſt one from the other.

To ſaile out of the Ailſen ſound from Areu or the Melver-

The Roen. ſound, then go from Areu or Toreu unto the Roen eaſt and by ſouth three leagues, and then through betwixt the Iland and Fuynen that is alongſt to the northwards of Roen, for you can not goe about to the ſouthwards of it. The Roen is a bad and ſhowld riffe ſhooting of from Aelſeu, whereunto it is faſt, the outher end of it lyeth dry like Anoutriffe. From the Roen to Arr or Koping the courſe is ſoutheaſt and by eaſt 5 leagues.

From the ſoutheaſt end of Aelſt ſhooteth off a great riffe to-

Poles riffe. wards Arr called the Poles riffe: you muſt run through betwixt Arr and that riffe, leaving two third parts of the water on the Aelſen ſide, and one third part towards Arr, & runne on ſo with the ſouth end of Langeland, until that you come againſt Copē.

From Arr to the ſouth end of Langeland, the courſe is ſouth-eaſt and by eaſt, and e. ſ. e. foure leagues. And from the Poles riffe to the ſouth end of Langeland, the courſe is weſt and by ſouth ſix leagues. You may run through betwixt Langeland and Arr the Northwards and come out againe into the Belt

Taſſing. by Nyburgh: from the ſouth end of Langeland to Taſſing, it is north and by weſt 6 leagues) you may ſail about Taſſing on both ſides, and leave Arr and the foule grounds lying on the one ſide of you. Upon theſe grounds it is but ſix foot deep.

You may alſo ſaile through betwixt the foreſaid grounds and Fuynen into the ſound of Aelſen, unto the little Ilands of Areu and Toreu, as hath been ſaid here before.

From the little Iland Areu to Apenrade the courſe is ſouth-ſouthweſt five leagues. The ſound of Apenrade is a broad open

The ſound of Apenrade. ſound, upon which lyeth the foreſaid towne of Apenrade.

From the river of Apenrade unto the crooked channell of Sonderburgh, which goeth in betwixt the Iland Aelſen and the maine land, the courſe is eaſt 3 leagues, there you may ſaile through about behinde the Iland of Alſen to Sonderburgh, and then forth into the ſound of Flensburgh. It is very narrow and crooked betwixt the Iland and the maine land, but when you are come through the narrow and crooked channell into the ſound of Flensburg, there it is broader and larger.

Sound of Flensburg The ſound of Flensburgh goeth in betwixt Sonderburgh & Holſterland, being a broad ſound. He that will ſaile in there, muſt take very good heed of the Holſters ſide, when you begin to come betwixt the two lands, and run in alongſt by the land of Aelſt, for from Nubell or Holſterland lye off the Chalck grounds halfe wayes the deep. This ſound lyeth in weſt and by ſouth untill that you come before the river. There lyeth in the rivers mouth a little Iland on the ſtarboard ſide, you muſt run in to the eaſtwards of it, and goe in weſt and by ſouth and weſt, untill you come within the crooked channell of the River or Sound, and then you muſt goe up againe ſouthweſt then you ſhall ſee the towne of Flensburgh lye before you.

Chalck-ground.

Of the depths about theſe places, and in what depths men may ſee the land.

In the Ripe, Eyder and Hever, a ſouth and north Moone maketh the higheſt water, the flouth commeth there out of the northweſt, and the ebbe out of the ſoutheaſt, and ſo run over the north grounds.

In the deep of Liſt or Silt, a South and north Moone maketh the higheſt water, the flood commeth there out of the northweſt, and falleth very little alongſt the land, and the ebbe to the contrary.

In Knuyts-deep, a ſouthſouthweſt and northnortheaſt Moone maketh the higheſt water. The flood commeth here alſo out of the northweſt and falleth but a great quarter tyde alongſt the land, and the ebbe to the contrary.

In the Haven of Zuyderzijt, the Growe-deep, the Schellingkroegh a ſouth-ſouthweſt and northnortheaſt Moone maketh the higheſt water, the floud commeth there alſo out of the northweſt and falleth over the Reefshorne towards the Iuttiſh Iland, and the ebbe againe to the contrary, off from the land in the north Sea.

Of the grounds and depths.

The grounds of the Hever & the banckes of the Smal deep without the Strand and Eyderſtee, lye at leaſt two leagues without the coaſt of the land.

Betwixt Holyland and Ameren or Strand it is tenne or eleven fathom deepe, in that depth you may ſea both the lands, if you climbe up in the ſhroudes. Strand is to bee knowne by the ſteeple of Pielworme, ſtanding upon the ſouth end of the land; Upon the Iland ſtrand more Churches and ſteeples, but none ſoo good to be knowne as Pielworme.

Ameren is a league and a halfe long, & hath all alongſt low ſandhils growne with ſpiry graſſe.

The Iland Silt you may ſee in ten fathom: Upon this Iland (neareſt to the north end) lyeth a high ſteepe red cliffe, on both ſides going ſloping downe; upon the ſouth ſide of the ſide of the cliffe ſtandeth a flath Church, with a low ſteeple, and to the eaſtwards of it another Church, with a high thick ſteeple called Heydom. The north end of the Iland is called Liſt, and the ſouth end Voortrap.

Courſes and Diſtances.

From the Eyder to Hever the land lyeth northnorthweſt and ſ. ſ. e. 5 leagues
From the Hever, or the ſouth end of Strand to the ſouth end of Ameren north-northweſt about ——— ——— 5 leagues
Two leagues north from Ameren lye h Silt which is about 5. leagues long, and lyeth ſouth and by eaſt, and north and by weſt.
From the North end of Silt, called Liſt, unto the ſouth end of Rim or Rem, it is northeaſt and ſouthweſt one great league, Rem is three leagues long, and lyeth moſt ſouth and north.
From the north end of Rem, to the ſouth end of Manu, it is northeaſt and ſouthweſt a league and a halfe, you can hardly get ſight of it by reaſon of the grounds, and great ſhowlds, which lye thwart of it to ſeawards.
Manu and Phanu lye about two leagues one from the other, Manu is almoſt a league long, and Phanu about 4 leagues long, and lyeth from Phanu Knuyter to Knuytes deepe, ſouthſoutheaſt and northnorthweſt. This Iland hath alſo a faire ſtrand, but the north end towards Grouwedeepe is very flat.
From Phanu to Dodenbergh it is about foure leagues, betwixt them lye the Haveus of the Grouwedeepe and Schelling-kroegh.
From Holyland to the Eyder eaſt and by north, and weſt and by ſ. 7 leagues
From Holyland to the outermoſt buy in the Hever, n. e. and ſ. w. 8 leagues
You may lye by the outermoſt buye in the Hever, and ſee Holyland with cleare ſight.
From Holyland to Ameren or Smalle-deepe, northnortheaſt ſomewhat eaſterly, and ſouthſouthweſt, ſomewhat weſterly ——— 10 leagues
From Holyland to the deepe of Silt or Liſt, north and by eaſt 19 leagues
From Holyland to Knuyts-deep or Ryper-deepe, north and north and by eaſt ——— ——— ——— 25 leagues
From Holyland to the Horne or the Dodenbergh north and by S. 32 leagues
From Knuyts deep or the Iland Phanu to the Flye, ſ. w. and by ſ. 50 leagues
From the Iland Silt to the Fly northeaſt and ſouthweſt, ——— 46 leagues
From the Doodenberg or the Horne, to the Haven or Numen or Rinkoper-deepe, North and by Weſt ——— ——— 7 or 8 leagues
From the Rinkopper deep, or the Haven of Numen to Boevenbergen north and by weſt about ——— ——— 10 leagues
From the Dodenberg to Boevenbergen, the land of Iutland lyeth north and by weſt, and ſouth and by eaſt ——— 17 or 18 leagues
From Boevenbergen to the Holmes Northnortheaſt ——— 9 leagues
From the Holmes to Robſnot or Robbe Knuyt northeaſt —— 9 leagues
From Robſnot to Hartshals northeaſt and by eaſt ——— 4 leauges
From Hartshals to the Scawe or Schagen eaſtnortheaſt —— 8 leagues
From Rinkopper or Numer-deep to the Fly ſouthſouthweſt or a little more weſterly about ——— ——— ——— 58 leagues
From Boevenbergen alongſt Iutland, without the grounds unto the Elve or the outhermoſt buy ſouth and by eaſt about ——— 50 leagues
From Boevenbergen to Holyland, ſouth and by eaſt ſomewhat ſoutherly about ——— ——— ——— 45 leagues
From Boevenbergen to the Flye or Borneriffe ſ. ſouthweſt about 69 leagues
From Boevenbergen to the north Forland ſ. w. and by ſ. 118 or 120 leagues
From Boevenbergen to the Holmes before Yarmouth ſouthweſt 93 leagues
From Boevenbergen to Flamborough-head weſtſouthweſt 100 leagues
From Boevenbergen to Scarbrouge w. ſ. w. ſomewhat weſterly 100 leagues
From Boevenbergen to the River of New-Caſtle or Tynemouth Weſt and by ſouth about ——— ——— ——— 106 leagues
From Boevenbergen to Boecknes weſt and by north about 106 leagues
From Boevenbergen to the Naze northweſt and by north —— 24 leagues
From the Riffe in ſixteene fathom to the Fly ſ. and by weſt 62, or 64 leagues
From the riffe in eighteen fathom to the ſtrait betwixt Callice and Dover ſouthſouthweſt about. ——— ——— 120 leagues
From the Holmes to the Naze northweſt about —— 19 or 20 leagues
From the Holmes to Fleckery northweſt and by north, —— 9 leagues
From the Holmes to Mardow north - ——— 14 leagues
From the Holms to Longſound north and by eaſt —— 35 or 36 leagues
From the Holmes to Ferderoer northnortheaſt ——— 40 leagues
From the Scawe to Tynemouth weſtſouthweſt ——— 136 leauges

From the Scawe to the Naze weſt — 33 leagues
From the Scaw to Fleckery weſt and by north — 25 or 26 leagues
From the Scaw to Reperwick weſt and by north and n. northweſt 24 leagues
From the Scawe toMardowe northweſt and by weſt 20 or 21 leagues
From the Scawe to the Longſound northweſt and by north or a little more northerly — 21 leagues
From the Scawe to Ferderoer north and by weſt — 23 leagues
From the Scawe to Otturen north and by eaſt, — 24 or 25 leagues
From the Scawe to Maelſtrand eaſtnortheaſt — 21 leagues
From the Scawe to Nidinck eaſt and by ſouth — 15 or 16 leagues
From the Scawe to Watersbergen eaſt ſoutheaſt — 19 or 20 leagues
From the Scaw to the Trendels ſoutheaſt — 8 leagues
From the Scaw, about ſeaboard, the Trendels ſoutheaſt and by eaſt 8 leagues
From the Scawe to Leſolde, or the north end of the riffe ſ. ſ. e. 8 leagues
From the Scaw to Leſon ſouthſoutheaſt — 8 leagues
From Schaw to the Small Helmes ſouth and by weſt — 4 leagues
From the Scaw to Seabuy ſouth and by weſt — 9 leagues
From the Helmes to Seabuy — 2 leagues
From Seabuy to Aelburger-deep ſouth and by weſt — 7 leagues
From Aelburger-deepe to Mariacker ſouth and ſouth and by weſt 4 leagues
From Aelburger-deep to Stevenshead ſoutheaſt and by ſouth 9 leagues
From Aelburger-deep to Haeſlin ſoutheaſt and by eaſt 20 leagues
From Stevenshead to Haeſlin eaſtſoutheaſt — 13 leagues
From Stevens-head to the great Helme ſouthſouthweſt and ſouth and by weſt about — 6 leagues
From Stevenshead to the point of Ebeltud ſouthſouthweſt 7 or 8 leagues
From Stevenshead to Syro ſouthſoutheaſt — 8 leagues
From the great Helme to Wero ſouthſoutheaſt — 4 leagues
From the great Helme to Sampſo ſouthweſt — 4 leagues
From the ſouth end of Ebeltud to Aerhuyſen weſt and by north and weſtnorthweſt — 5 leagues

From the road of Sampſo te Ebelo ſouthſouthweſt, and ſ. and by w. 5 leagues
From the ſouth end of Sampſo to the Iland Ebelo, the courſe is ſ. w. 4 leagues
The northweſt coaſt of Fuynen lyeth ſouthweſt and by weſt 8 leagues
From Endelaw to Melverſound ſouthweſt — 5 leagues
From Ebelo to Melverſound ſouthſouthweſt, ſomewhat ſoutherly 6 leagues
From Sampſo to Roems ſoutheaſt — 5 leagues
From Syro to Roſnes ſouthſouthweſt — 4 leagues
From by weſt Syro to Roems ſouthſouthweſt and ſouth and by weſt 9 leagues
From Wero to Bultſack ſouthweſt. — 4 great leagues
From Wero to Roms ſouth and by eaſt — 8 leagues
From Romps to Knuytshead ſouth and by eaſt and ſouthſoutheaſt 5 leagues
From Knuytshead to Langeland ſoutheaſt — 4 leagues
From Knuytshead to the Iland Taſsing ſouth — 4 leagues
From the ſoutheaſt end of Fuynen the eaſt poynt of Asken, weſt and weſt and by north — 5 leagues
From the poynt of Askens to the little Ilands of Areu and Toreu, weſt and by north and weſtnorthweſt — 2 leagues
From Areu to Melverſound northnorthweſt — 2 leagues
From the poynt of Ruſnes in Zealand, to the Iland Syro, ſouth 8 or 9 leagues
From Ruſnes to Caſſeur ſouthſoutheaſt — 9 or 10 leagues
From Spro to Langeland ſoutheaſt and by ſouth — 4 leagues
From the north end of Langeland to the ſouth end ſouth — 8 leagues
From the ſouth end of Langeland, to the Iland Arr, the courſe northweſt and by weſt ſomewhat weſterly — 4 leagues
From the Iland Arr, or Koping, to the Roen, the courſe is n.w. & by w. 5 leag.
From the Roen, to the little Iland Areu, weſt and by north 3 leagues
From Areu to Apenrade ſouthſouthweſt — 5 leagues
From the river of Apenrade to the Strait of Sonderburg eaſt 3 leagues
From Sonderburgh to the Sley, ſoutheaſt and by eaſt — 4 leagues
From the ſouth end of Langeland to Femeren, the courſe is ſoutheaſt and by eaſt — 6 leagues

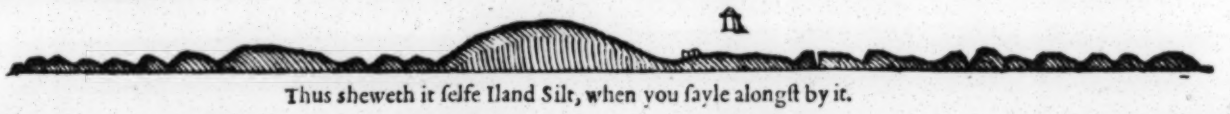
How theſe Lands doe ſhew themſelves at Sea.



Thus sheweth the Land of Eyderſtee to the northwardes of the Eyder.



Thus sheweth the Iland Ameren.



Thus sheweth it ſelfe Iland Silt, when you ſayle alongſt by it.



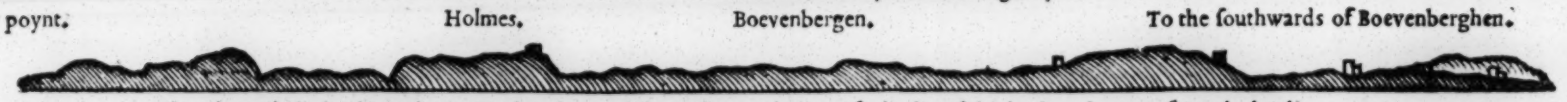
Thus sheweth the Land of Zuyderzijt to the ſouthwards of the Doodebergh



Thus sheweth the Land betwixt the Horne or Doodenbergh and the Haven of Numen.



Thus riſeth the Land betwixt the Holmes and the Scaw, when you ſaile alongſt by it.



Thus sheweth the land betwixt Boevenberghen and the Holmes, when you ſayle alongſt by it, three leagues from the land.

The fourth Demonſtration,

Where in Are portrayed how you ſhall ſayle from the Koll in the Sound, and forth through the Droogen, untill you come about Valſterboen, and further the coaſt of Holſten, Meklenburgh, and the Soutern Ilands of Denmark, from the Belt to the Ielle.

Haeſlin. FRom Coll to the Iland Haeſlin, it is ſouthweſt and by weſt eight leagues, you may ſayle through betwixt Haeſlin and Zealand, untill you come into the Belt: the coaſt of Zealand is a faire ſtrand, but ſomewhat to the weſt wards of Haeſlin, there ſhooteth off a riffe to ſeawards, which you muſt avoyd.

About eaſtſoutheaſt from Haeſlin goeth into the Land a great broad Sound, which without at the entrance of it, is a great league broad, there is good anckoring for a northweſt winde in five or ſix fathom. The Sound divideth it ſelfe within the land into three parts, the firſt or the eaſtermoſt, called Roskildifiourd, goeth up ſouthſoutheaſt unto Rockil, the ſecond, called Iſenvoert, lyeth into the land ſouth, and South and by weſt at leaſt or ſix leagues, unto Iſick by and Holbeck: within is at leaſt two leagues broad, and in the middeſt lyeth a great Iland. The third lyeth to Draeckſholme alſo at leaſt five leagues Southweſt, and northeaſt, like the coaſt towards the Belt. The Coaſt of Zealand, betwixt Haeſlin and the Sound is a clean coaſt, you may ſayle alongſt by the Land in ſix or ſeven fathom, but come no nearer to it by night then twelve or thirteene fathom, for at ſome places it is ſteep, and ſhowldeth up ſuddenly. Where that little new church ſtandeth, thwart of it, it is flat three and foure fathom, and to the weſtwards of that wood which ſtandeth to the weſtwards of Lapſand, you may come in foure fathom by the ſhoare, without taking hurt, but comming neare Lapſand, you muſt keepe further off from the ſhoare, in ſeven or eight fathome, or els you ſhowld gette behinde the poynte of Lappeſand.

Roskildifiourd. Iſenvoort.

Lappeſand lyeth about an Engliſh mile to the northwards of Elſenoore, or the Caſtel of the Sound, lying on the weſt ſide of the ſaile waye, alongſt the coaſte of Sealand. For to avoyde Lappeſand you muſt be carefull of theſe marcks, there ſtandeth a houſes to the weſtwards of the Kings mill, to the weſtwardes of the Caſtle of Cronenburgh, keep the Chimney of that houſe to the weſtwards of the front of the Kings mill, and then you can take no hurte of Lappeſand, then runne alongſt by it in ſix, ſeven or eight fathome, ſo long untill that the eaſt end of the Iland Ween cometh a little without the caſtle of the Sound, keepe that ſo ſtandingh, and ſayle ſo in ſixe or ſeven fathom ſomewhat cloſe alongſt by the caſtle: you may plainly ſee lying through the water al that can hurt you. Lppe. ſand.

If you will ſhift roads out of the Sound, and anckor behinde Lappeſand, then ſayle thwart of the foreſayd Kings houſe called the Caux or Kings mill, ſo that it doe ſtande about ſouth or ſouth and by weſt or ſouth and by eaſt from you, anckor there in ſix, ſeven or eight fathom, there it is good lying out of the current and ſand ground: but if you will anckor in twelve, thirteen or fourteen fathome, there it is ſoft ground, and there goeth a ſtrong current with ſoutherley or ſoutheaſt windes, but you lye there better, in more roome, for to ſayle inwardes againe, if it ſhowld happen that the winde did ſodenly ſhift out to the northweſt. It happened once to one of my acquaintance, that head anckored ſomewhat to the eaſtwards of the Kingsmille, in ſixe or ſeven fathom and the winde did ſhift in the night to the northweſt, when they weighed their anckor the ſhippe fal towards the land, and before they coule get the ſhip about For to anckor behinde Lappeſand.

T LANDT TE SCHONEN

ZEELANT

Kol

Elsenburch

Drakenburch

Lappesande

De Sondt

Slot Kroonenburch

Elsenæur

Ween

Saltholm

Noortsant

Middel grondt

visscher

Reef sol

Draker

Coppenhaven

Elbogt ofte Malmugen

Pastaerte van Kol door de Sont tot om Valsterbon als meede de zuijdelijxste Eylanden inde Belt tot ant Eylant Rugen.

De Gelegentheyt tusschen de Sont en Coppenharē in grootbestee

2. Lieues d'Allemagne twee Duytsche mylen

Les Costes Marines de la Belt, et la Sondt jusques à Valsterbon.

Rugen

Dragmuhsch

Strausund

MEKE

Ports

Rohbnes

LEN-

Rostick

Ter munde

BVRCH

Omevaar

Boechhooch

Wismer

Tollandt

Ter munde

Grantz Ertzpoort

Cleine Cruysoort

Meun

De Ekt

Stuch

Geister

Geister Ryf

Falster

LALANDT

Fenteren

De Hoken

Colberger Heyde

Heiligenhaven

Reuterne

HOLS

TER

LANDT

Lange Landt

Kopma

Sismer

Lubeck

Ter munde

De Stre

Kiel

Duitsche mylen 15 voor een graadt

Spaansche mylen 17½ voor een graadt

Engel en Fran. mylen 20 voor een graadt

MUSEUM

about before the winde, they did runne in three fathom over the poynt of Lappesand.

From Coll to Elseneure or the Sound the course is southeast, and southeast and by south four or five leagues. About halfe wayes betwixt Coll and Elsenburgh lye the Swyneboeden, which are some foule rocks, and suncken rockes, which lye of to seawards a good wayes from the land, But when you sayle towardes the Sound comming from Coll, then keep the Iland Ween hidden behinde the Castle Cronenburch, and then you can not sayl foul of the foresayd Swyneboden, when that you reckon that you are past them, then runne in amidst the channell, for to avoyde Lappesand, or els if you bring the end of Ween then again right without the castle, or keepe in seven or eight fathom from the Sealands side, you can not take hurte of Lappesand, when you are come within the castle, you may anckor where you please. The shippes doe commonly anckor all alongst by the land untill to the southwards of Elseneure, there it is fifteene and sixteene fathome deepe, but with a southeast winde it is badde lying there.

Swyneboden.

For to avoyd Lappsand.

Towards the Iland Ween lyeth a banck of eight or nine fathom it is better lying there, but is somewhat farre from the land.

When you will sail out the Sound towards Col, and are come to the end of Lappesand, then goe northwest and by west for to avoyde the Swyneboden, untill that Coll be northnortheast from you then goe boldy northwest and by north, or northnorthwest, according as the winde shall be, for with a northeast winde, you must runne out northnorthwest verie close alongst by Col, for to sayl a weather of the Riffes of Anout and Leson.

For to sayl out of the Sound,

For to sayle to Elleboge or Malmuyen, and Lands-kroone.

If you will sayl out of the Sound to Elboge or Malmuyen, goe from Ween southeast and southeast and by south, and then you shal see the steeple or the towne lying before you, sail towards it, in that farewaye, it is most seven or eight fathome deepe: when you come within the south-holms, it will be 5 or sixe fathom deep, it doth shoulde up sodenly, from the seven fathome to five, but before the towne it is showlder water, you may anckor there in three, four or five fathome if you will, you may lye also at the end of the Head, in three fathome, there it is good lying, but with a northwest winde it is a bat roade, for it bloweth there open in.

If you will runne out againe to the southwards of the Southholmes towards Fasterborne or Steden, you must take heed of the South-holmes, which are foule round about. From the n. end shooteth of a riffe a great wayes: Upon the east side, at the south end, it lyeth verie farre off should, there lyeth also the Northvliet, that is a ledge of rocks under water, but you may perceive it through the water, you shall leave it on the Southholms side, to wete, on the starboard side of you: but the Southvliet, which lyeth thward of old Fasterborne, you shall leave on the larboard side, and so runne through betwixt then, it is in that farewaye at the showldest four fathome deep. When you come off from Malmuyen, and that the steeple of Coppenhaven come to the S. end of the south-holmes, then you are past the Northvliet. When you sayle thus there through, you must be verie carefull to avoyde these foresayd groundes. You may runne out also alongst by the strand of Schoonen, and leave both the Northvliet and Southvliet lying on the starboard side: you may sound that strand in four and five fathome, as also the riffe of Fasterborne.

Northvliet.

Southvliet.

Landscroone.

He that will sayl into Landscroone, must know that there lieth a shoulde before the havens mouth, & must runne in about to the southwardes of it: there standeth a little church on the north side, by the water side and a Gentlemans house somewhat farther within the land, bring that church over the house, and then you are cleare of the showld, then saile in right with the ponyt, and anckor in three fathome.

To the northwards of old Falsterborne goeth in a deepe, called Hull or Hulwater, it is a deepe haven for ordinarie ships, which goeth in must northeast in three or foure fathom; you may sound it in alongst by the footstrand of old Fasterborne in three fathom, leaving old Fasterborne on the starboard side, it is there large and broad enough.

Hulwater,

How men shall saile out of the Sound, through the Showldes or grounds, and into the Reefshol.

He that will sayle out of the Sounde towardes the Shouldes or Grounds let him goe on south and by east, or hee may sound alongst by the wood, in five or sixe fathome and then the shall not sayle misse of the Norther buye, for it lyeth in five or six fathom, on the north end of the Middle ground, to the eastwardes of the buye it is seven fathom deep, but in the right

Norther buy.

farewaye thwarte of this buye it is nine or tenne fathom deep: the markes of this buye are, when that end of the wood is westsouthwest from you, then you are thwarte of the norther buye, & there standeth then a flat steeple, a pretie wayes to the S. wards of that wood: there cometh also three hommocks to the north side of the town, these are all marks of the norther buye.

From the Norther buye to the middlebuye the course is south and by east. When you come by the Middlebuye, then commeth the southermost mill on to the southwardes of the towne op Coppenhaven, and the flat steeple commeth within a handspikes length unto the sharpe steeple, that are the markes of the Middle buye, or second buye in the shouldes or grounds, it is there eight and nine fathome deepe.

Middle buy

Third buye.

From the Middle buye to the third, and for to the buye upon Casper Caniell, the course is south and by east. When the white castle commeth over the sharpe steeple, that are the markes of the fourth buye, or the buye upon the Casper Caniell, the third lyeth at the south end of the Middle ground, it is not there verie broade, but steepe on both sides, the deepe thereaboutes is seven or eight fathome: If you must turne to windewards there, you must cast about, so soone as is doth beginne to showlde, as well on the one side is on the other.

Buye upon Casper Caniell.

The fourth buye lyeth on the north end of Draecker upon the flat, over against it lyeth a rock above water, called the Fisher, east & by north from the buye, ther you may wel sound the southolme, for it is there showld water. Betwixt the third & this fourth buye commeth running out a channell from Copenhaven, which men doe cal Casper Caniel, or the Kingsdeep.

Fisher.

From the fourth buye or Casper Caniell, to Draker riffe, the course is south, and south and by east: the land of Draecker you may sound in three, foure, or foure fathome and a half.

Riff of Draker.

The Riffe of Draecker lyeth a good wayes without Draker, it lyeth off halfe league east into sea. The markes of the buye upon Draker-riffe are these. When the steeple of Copenhaven commeth to the southwards of Draker to the wood, then you are thwart of the buye. The showldest water that you shall finde betwixt this buye upon Draecker-riffe, and the foresaid fourth buye, is five Fathom lesse two foot. For to sail by night through the showlds or grounds, go from the Iland Ween south and south and by west, so long untill that you come thwart of the point of the wood in 4 fathom, then keep somewhat off from the shore, and go on southeast and by east, untill that you come in 7 fathom, and then forth southsoutheast, untill you be over the Middle-Ground, the first or northermost buye, as is beforesaid, lyeth in five or sixe fathom, but you may well go over to the westwards of it, in three or foure fathom, keepe then somewhat off untill that you come in eight, nine, or ten and eleven fathom, and sail then on south unto Casper Caniell, there it will be by little and little showlder, to wit, about eight fathom. Thwart of Draker it is uneven for to sound, the one cast five & the other foure fathom, but go your course, except you knew that you were neerer the one shore of Draker, or the Southolmes, then the other. Without Draker it will be againe 6 and 7 fathom deep.

For to saile into Riffholl or Copenhaven, comming from the northwards out of the sound; runne along somewhat to the westwards of the Norther buye, for to avoyd the plate, or Middle ground, which lyeth to the westwardes of the buyes in the showlds, which upon the north end is not deeper then 12 foote, and on the south end eight, nine, and at some places ten foot deep, al hard stony and rocky ground, keepe the sounding of the shore on the west side in two, three, or foure fathom, so deep as you please, untill you com before Copenhaven, on that side you can take no hurt, it is there broad and wide, and lyeth in south and by west, in the middest betwixt the shore and the Middle-ground, it is 5, 6, and 7, fathom deep. If you showld turne to windwardes there, to come not neerer the middleground then in foure fathom but, the west shore you may runne to by may runne to by your lead, as you please.

From the north end of the Iland Draecker runneth off a riffe to the northwards, upon the poynt of that riffe lyeth a buye, which men do call the buye in the Reefsholl, leave that on the larboard side, & run in, until you come before the towne, and anckor there. If you come from the southwards, and will sail unto Reefshol, then run alongst to the eastwards of the foresaid fourth buy (which men do call the buye upon Casper Caniel) then loose up presently about by it, and go on N. W. into the Kings-deep, unto the buye in Reefsholl, which lye one from the other due northwest, and southeast: you shall then also see eight out a head, in the northwest within the land a flat steeple right over a great house or Hospital, that standeth close upon the sea-side, keepe them so one in the other, and sayle right

Buye in the Reefsholl.

in with them, and ſo you ſhall runne in right amidſt the channell, it is there in the farewaye, five, ſixe, ſeven, and eight fathom deep. This Kings-deepe is ſomewhat uneven of ground, therefore be careful in uſing of the lead, and come not to neere the north ſide, that is the Middle-ground, which is very foule and rocky: from the S. ſhore (about halfe wayes betwixt the two foreſaid buys) it lieth of ſomewhat ſhowld, ſo that you ſhal have at one caſt five or ſixe, and the other but 3 fathom.

When you come by the buy in the Reefsholl, which lyeth upon the point of the norther riffe of Draecker, leave that on the larboard ſide, and runne on ſouth about by it unto Copenhaven. The markes of this buy are theſe: there lieth a round hommock or great rock about halfe a league within the land, when that is right e. from you, then it cometh right with a flat ſteeple which ſtands about a league within the land, then you are even thwart of the buye, or point of the foreſaid riffe. Theſe marcks will ſerve at times when the buye lyeth not there. A little to the northwards of that buye lye the great ſhips which taray for wind in 5 or 6 fathom, there is good anckor ground.

Marcks off the buye in the Reef holl.

From the buy upon Draker-riff unto Kuyck the courſe is S.W. 5 great leagues, but unto the riffe of Falſterborn, or Steden it is ſouth and ſouth and by weſt 5 leagues; in the fareway betwixt Draecker and Faſterborn it is 6, 7, and 8 fathom deep, but between Faſterborne and Steden, 10, or 12, and 15 fathom, but by Steden deepeſt.

Kuyck.

Under Steden you may anckor as well to the ſouthwards of it, for northerly, as to the northwards for ſoutherly windes. If you will anckor for northerly winds, then run in betwixt Steden and Meun, a good wayes into the bay, ſo that the ſteep point of Steden lye about northnortheaſt from you, anckor there in eight or nine fathom, and you ſhall lye land-lockt for north and northweſt winds.

Road under Steden.

But if you will anckor for ſouth or ſouthweſt winde, then anckor to the northwards of Steden, ſo that the ſoutheaſt point be ſouth and by eaſt, or ſouthſoutheaſt, and the N. W. point northweſt or weſtnorthweſt from you, there it is good lying in ſeven fathom, the ground is there ſmall white and blanck ſand. If you wil ſet ſaile from thence to the ſhowlds or grounds, then go not more northerly then northeaſt, ſo long untill that you come by the riffe of Draker, then run about by it in five fathom.

To the northwards of Steden the coaſt of Zealand goeth in with a great bay into Kuyck, it is there all to the weſtwards ſhowld water or five, ſixe and ſeven fathom, and good anckor ground, ſo that you may anckor every where there abouts.

The riffe of Faſterborne lyeth off ſouthweſt to Seawards a league and a halfe. It is a fowle ſtony and rocky riffe upon the end of it lyeth a buye in foure fathom. You may run about by it upon your lead in five fathom with ſmall or ſhips of little draughts. Men doe hold for a mark of this riffe that when the ſteeple of Faſterborn and the caſtle come one in the other, that then they are thwart of the point of the riffe. He that commeth from the northwards, and will ſayle about Faſterborne with a northerly or northeaſt wind, and that he wil come ſomewhat neere about the riffe, and commeth in five or ſixe fathom he muſt be very quick in uſing the lead. When old Falſterborne Church commeth halfe wayes to the Caſtle and the Church of Faſterborne, then beginneth to come the worſt and ſhowldeſt of the riff, that laſteth untill that old Faſterborn church cometh to the eaſtwards of the houſes of Faſterborne, before that you are not paſt the riffe. If you ſhowld luffe up ſooner about by it, you ſhowld run in great danger with a ſhip of great draught, you ſhall have (comming againſt the riffe) the one caſt four or five and then preſently three fathom upon it all hard ſtony ground. Therefore it is beſt with a ſhip that draweth 12, or 14 foote, to come no nearer this riffe then in 6, or 7 fathom.

Marks of the riffe of Faſterborne.

If (when you come from the eaſtwards) you will ſaile about Faſterborne, and come alongſt the ſhore with a northeaſt wind in ſixe or ſeven fathom, and Falſterborne is about north, or northnortheaſt from you, then is ſhowldeth up very faſt in two fathom, or two fathom and a halfe. Therefore keepe you further off from the ſhore in 10, or 12 fathom, ſo long untill that the caſtle bee northeaſt, or northeaſt and by north from you: or that old Falſterborne church come halfe way to the caſtle of Falſterborn and Falſterborn church, then you can not ſaile upon the riff from the eaſtwards, but running about by it in five fathom, then you muſt be very carefull in uſing your lead. But if you wil come neere the riff in foure or five fathom, when old Falſter-born Church commeth too the eaſt end, Falſterborn, you ſhall run in great danger for to come on ground. When you come within the riffe, you may run alongſt by the coaſt of Schoonen in four fathom without taking hurt.

To the ſouthwards of the Sound of Flensburgh, lye yet three Sounds or rivers, where great ſhips may goe into, to wit, the Sley, Nylhofvoert, and the Sound of Kiel, the land lyeth of from Flensburgh to Kiel ſouthſoutheaſt or ſomewhat more eaſterly ſixe leagues.

From Sonderburgh to the Sley the courſe is ſoutheaſt and by eaſt 4 leagues, that is, a broad deepe ſound, lying in firſt about weſt, and when you are within it, then it runneth in about ſouthweſt and by weſt paſt Sleeſwyke, there alſo come out many great ſhips. The town Gottorpe lyeth alſo upon this river.

The Sley.

Betwixt the Sleye and Ciel lyeth Nylhofvoert, upon it lyeth a little town called Eeckelenfoort.

Nylhofvoert.

The Sound of Kiel is a broad Sound, which lyeth in about ſouthweſt, there you may go in alſo with great ſhips. From Kiel to the weſt end of Femeren it is eaſt and by north about eight leagues.

Kiel.

From the Poles riff to Femeren (over the Coelbergher Heyd) the courſe is eaſtſoutheaſt 13 or 14 leagues, but from the ſouth end of Langeland unto Femeren it is ſoutheaſt and by eaſt 7 or 8 leagues. The channell betwixt Femeren and Laland is 5 and 6 fathom deepe, you may ſayle round about Femeren, there it is all ſhowld ground. Betwixt Femeren and Holſterland, you may run through in 8 or 10 foote, there lyeth a little town, called Heyligher haven, where you may anckor with ſhips of ſmall draughts from to lade wheat or barley. From the Iland Femeren to Geſter-rif the courſe is eaſt and by north ten leagues. But from Femeren to the Trave of Lubeck S. S. W. ten leagues: there goeth in a good Deep for great ſhippes, it is deep upon the banck 12 foot water.

Femeren.

Heyligher haven.

There is alſo a great bay and a good haven, where men may lye ſafe for all winds, except the northeaſt and northnortheaſt winds. From the Trave of Lubeck to Geſter-rif the courſe is northeaſt and ſouthweſt about nineteene leagues.

From the Trave of Lubeck to Wiſmer-deep the courſe is firſt northeaſt and by eaſt, and then eaſtnortheaſt, there goeth in a faire deep for all ſorts of ſhips.

Deepe off Wiſmer.

For to ſayle in at the deep of Wiſmer, bring the ſteeple upon the ſouth land ſouth from you, and ſaile ſo in untill that the ſteeple ſtanding upon the eaſtland, by that eaſtermoſt houſe, commeth to the five or ſixe houſes, by theſe houſes ſtand ſome trees together, from that eaſtland runneth off a little riffe, lying off northweſt and by north from it, when the ſteeple commeth to thoſe houſes, then goe in ſouthſoutheaſt, in that deepe is twelve foot water. In the Summer there lye two buyes in the havens mouth, the one upon the tayle of the ſand that ſhooteth off from the eaſtland, and the other upon the ſhowld ground, you muſt run in betwixt them. This deep of Wiſmer lyeth from Femeren ſouth and by eaſt diſtant about ſeven or eight leagues, but from Wiſmer to Geſter riffe, the courſe is northnortheaſt, twelve or thirteene leagues.

About ſouth from Geſter riffe lyeth Roſtick, there goeth in alſo a good deepe of ten foot, it is there very flat, you may ſound it in on both ſides with the ſounding poll. Wiſmer and Roſtick lye about eight or nine leagues aſunder.

Roſtier.

Somewhat to the eaſtwards of Roſtick lyeth a high land called Robbeneſſe, from it ſhooteth off a great riffe or ſhowld too ſeawards, towards Geſter riffe, it is betwixt Geſter riffe and that ſhowld not deeper then twelve or thirteene fathome. If you come neareſt to Geſter riffe, then it doth ſhowld up ſoddenly, but if you come neareſt this ſhowld, then it ſhowldeth by little and little. Geſter riffe, as hath been before ſaid, is a ſhowld riffe, and runne off at leaſt 3 leagues into ſea.

Robbenes.

A little to the eaſtwards of this foreſayd ſhowld lyeth Barts, there goeth in a deepe of 6 foote, at the weſt poynt goeth of a riffe, which men muſt avoyde.

Barts.

Three or four leagues to the eaſtwards of Barts goeth in the Jelle, there men doe goe into Meſond, or Straelſound there is no more then ſixe foot water. In the Jelle lye three buyes, which you muſt leave al on the ſtarboard ſide, being paſt them eaſtwards, up unto the beakon upon the Iell, you muſt looſe up about by it, and ſayle to the middle plate, which you muſt leave alſo on the ſtarboard ſide, and then ſouth and by eaſt unto Straelſound. Within the mouth of the deep, it is 12 and 14 foot deep.

The Ielle.

The Iland Langheland is about eight leagues long, and lyeth ſouth and north, to the eaſtwards, over againſt it lyeth the Golverſound, lying into the northwards of Laland, all alongſt up unto Neſtvelt and Wordenborgh and commeth into the Greenſound, and into the Wolvegat, and again into the Eaſt ſea: Before the Golverſound lye three litle Ilands the one at the poynt of Laland, which is called Wedero, and is alſo faſt to it with a riff, ſo that men can not ſayl through there betwixt them;

Golverſound.

Wedero.

Pascaarte vant

SCHAGER-RACK.

Ende Custe van Norwegen tot

Aberfondt Beschreven Door

Lucas Janss. Colom.

Aberfondt

Schagen

VII

Carte Marine de
Akersondt et Schag
jusques à Kol.

Duytsche mylen 15 voor een graadt — Lieues d'Allemaigne 17 en un degre
Engel. en Fran. mylen 20. voor een graadt — Lieues Angl. et Franc. 20 en un degre
Lieues d'Espaigne 17½ en un degre

SVE — t'Landt van Noordooosten — HA — LANT

Elsenor — Helsingh — Laholm — Engelholm — Helmst — Ängelholm — Halstadt — Katterop

Reesfout — Courbar — Waersbergen — Valckenburgh — Tyghe — Swedere — Kol

Tgat van Aldefont

Rif van Anout — Anout — Luyse grunden

H A G E R — R A C K

De Trindel — Haselön — Rif

Lesou — Dwdulgronden

D E B E L T

BRITISH
11 JUL
MUSEUM

them, to the northwards of it men doe runne into the Golverſound, leaving that Iland on the ſtarboard ſide: the other two lye to the northwards of the foreſaid Iland of Wedero, the one is called Arnis, and the other Ooms. Ooms is a little playne Iland, but Arnis is the greateſt, which lyeth neareſt to Zealand, and is full of trees. From the Iland Ooms, lyeth off a riffe ſouthweſt to ſeawards, which is a great league long, and upon the end flatte, which men may runne over by the lead. When you will ſayl into the Golverſound you muſt leave theſe two Ilands lying on the larboard ſide. The Iland Laland hath upon the weſt poynt over againſt the ſouth end of Langeland, a riffe or Hooke, lying off from Laland at leaſt half wayes over the Belt: for to avoyde that, you muſt runne alongſt within an Engliſh mile to the eaſtwards of Langeland; or when you leave the two third partes of the water on Lalands ſide, and the other third part on the ſide of Langheland, you ſhall not come too neare it. When you come from the ſouthwards, and are bound into the Belt, and that then the ſteeple of Maſcou, which ſtandeth upon Laland commeth to ſtand northeaſt and by eaſt from you, then you are paſt that riffe, and lyeth to the ſouthwards of you: It is here in this channell betwixt Laland and the ſouth end of Langeland, five, ſixe, and ſeven fathome deep.

Arnis Ooms.

Riffe on Laland.

From the ſouth end of Langeland to Femeren the courſe is S. E. and S. E. and by eaſt diſtant 7 leagues.

When as you come off from Langeland and are paſt the riffe or Hooke of Laland, then the ſouth coaſt of Laland lieth eaſt and weſt: alongſt by it lyeth a ſand, which is called the Red-ſand, and lyeth alongſt untill before Colverſound which runneth in betwixt Laland and Geſter.

Redſand.

To the northwards of this ſand is a rode of 14, 16, and 18 foot water, before the little townes of Aelholm and Roobuy, where men do lade nuts and Barley.

Aelholme Roodbuye

Betwixt Laland and Geſter, thwart of this redde ſand (as hath been ſayd) runneth in the Golverſound, which men may run into, and come out again in to the Belt, but in this ſound or channell there is little depth, there lyeth a ſtonebanck within thwart over the channell. The little town Nicoppen lieth upon the Iland Falſter a league within Geſter. From Geſter ſhooteth of Geſter riffe, at leaſt three leagues into ſea, which is a ſhowld riffe.

Nikoppen Geſter-riff

To the eaſtwards of Geſter riff lieth an Iland called Bout, it is there abouts all ſhould water; to wete, 3 and 4 fathom.

Bout.

To the eaſtwards of Bout goeth in the Green ſound, by the little towne Stuybekuype, and commeth out again into the Belt to the northwards of Laland: the Green ſound lyeth in about weſt and weſt and by north in three fathom, there lyeth a ſhowld on the larboardſide of the mouth of the Sound, called the Tolck, which men muſt avoyde: you muſt goe in to the eaſtwards of it, you may lead it in alongſt by the land of Meun, in 14 or 15 foot, that foreſayd town Stuybekuype lieth about a league within the mouth of the channel.

Green-ſound.

Tolck.

Stuybe-kuyp.

From Geſter rif to Meun, the courſe is northnortheaſt eight leagues: but from Bout to Meun it is northeaſt about 7 leagues

From the Golverſound to Meun, the land lyeth in a bay, you may anckor there for a northeaſt, north, northweſt, and weſt winde, in five and ſix fathom.

He that commeth out of the Sound, and is bound to the ſouthwards of Meun, may come ſo near Meun as he will, and looſe up to the weſtwards by the poynt, and anckor where he pleaſe, in five or ſix fathom. On the north ſide of Meun you may alſo anckor in 6 fathom, behinde a little riffe that ſhooteth of from the north point, for an eaſt, S.S.W. and weſt wind, it is there all over flat, and good ground.

From Meun to Steden, the courſe is northweſt and by north 4 leagues, betwixt them both goeth in the Wolfſound, or Wolvegat, that runneth paſt Werdenborgh and Neſtveld through the Golverſound out into the Belt.

Meun and Falſterborne lye north and by eaſt, and ſouth and by weſt five leagues aſunder.

Of the ſtreames on theſe coaſts.

Through the Sound and the showldes or grounds, the ſtreame runneth commonly with the winde, but the moſt part of the time to the northwards, before the comming of a hard eaſt winde, or when it hath blowne out of the eaſt, then the ſtreames runnes ſtill out the northwards.

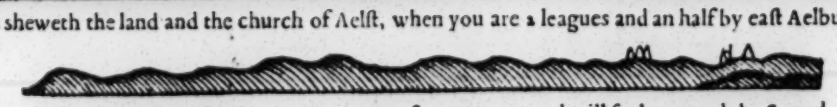
Courſes and Diſtances.

From Koll to Elſeneur the courſe is ſoutheaſt, and ſoutheaſt and by ſouth 4 or 5 leagues
From Lapland to Ween ſouthſoutheaſt —— 3 leagues
From Elſeneure too the northerbuye in the showldes or grounds, ſouth and by eaſt —— 6 leagues
From Elſeneur to Landſcroon eaſtſoutheaſt —— 4 leagues
From Ween to Malmuyen S. E. and S. E. and by ſouth —— 6 leagues
From Malmuyen to Reefsholme weſt —— 5 leagues
From Malmuyen to Steden ſouthſouthweſt —— 8 leagues
From the buy upon Draker-riff to Kuyck S. W. —— 5 great leag.
From the buy upon Draker-riffe to Steden, the courſe is ſouth and by weſt 5 great leagues
From the Buye upon Draker-riff to the buye upon Falſter-bornes-riffe, the courſe is ſouth —— 5 leagues
From the ſouth end of Langeland to Femeren, the courſe is ſoutheaſt and by eaſt —— 7 or 8 leagues
From the Fools-riffe, lying on the Iland Aelſt to Femeren, the courſe is E.S.E. 13 or 14 leagues
From the Sleye to the Kiel ſoutheaſt —— 4 leagues
From Kiel to Femeren, the courſe is eaſt and by north —— 8 leagues
From Femeren to the Trave of Lubeck ſouthſouthweſt —— 9 or 10 leagues
From the Trave of Lubeck to Wiſmer-deepe, the courſe is firſt northeaſt and by north and then eaſtnortheaſt in all —— 9 leagues
From Roſtick to Robbenes, the courſe is norheaſt —— 5 leagues
From Robbeneſſe to Doornboſch northeaſt and by eaſt —— 7 leagues
From Femeren to Wiſmerdeep, ſouth and by eaſt —— 7 leagues
From Femeren to Roſtick, E.S.E. —— 8 or 9 leagues
From Femeren to Geſter-riffe eaſt and by north —— 9 leagues
From the Trave of Lubeck to Geſter-riffe northeaſt —— 19 leagues
From Wiſmerdeep to Geſter-riffe northnortheaſt —— 12 or 13 leagues
From Roſtick to Geſter-riffe the courſe is north —— 7 or 8 leagues
From Geſter-riffe to Dornebosh eaſt —— 9 leagues
From Geſter to Meun northeaſt —— 7 leagues
From Meun to Steden northweſt and by north —— 4 leagues
From Meun to Vaſterborne north and by eaſt —— 5 leagues
From Meun to the buy upon Falſterborn-riffe north —— 4 or 5 leagues

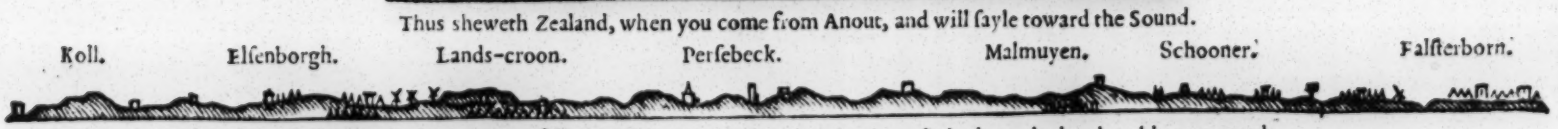
How theſe Lands doe ſhew themſelves at ſea.



Thus ſheweth the land and the church of Aelſt, when you are 2 leagues and an half by eaſt Aelburger-deep.



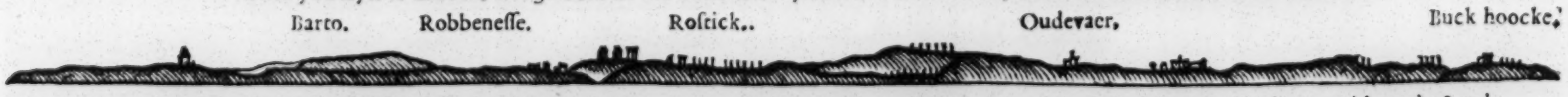
Thus ſheweth Zealand, when you come from Anout, and will ſayle toward the Sound.



Thus ſheweth the Land of Schoonen of from Col unto Falſterborne, when you ſayle through the showlds or grounds.



When you ſayle to Lubeck, alongſt betwixt the Land of Gruyſoort and Holſterland, then it ſheweth it ſelf on both ſides thus.



Thus ſheweth the Coaſt of Mekelenburgh, betwixt Cruyſoort and Dornebosh, or the Icelle, when you ſayle alongſt by it, a league without the Land.

The fifth Demonſtration,

Where in are ſhewed the Coaſts of Norway, betwixt Akerſound and Koll.

Akerſound. Graswyke

FRom the Siſter to the Iland of Akerſound, the courſe is weſt and by north 4 leagues, betwixt them lyeth the Graſwyke, within the Siſters, lying from Farder eaſt N. E. about 7 leagues. When you will ſayle in there, you muſt leave the ſharp poynt on the larboard ſide; within lyeth a round rock, which you may ſayl about on both ſides, thwart of it is good anckorground. North from this rock lyeth a great Bay, fit for ſhips to lye in, that tarrie for a winde, within

within lyeth alſo a round rock. Men do run in alongſt by the weſt land, which lyeth in firſt north, and about the Iland north-northeaſt, they leave the Iland on ſtarboard ſide, and run in N. N. W. by the weſt land. To the eaſtwards of Graſwike, alſo betwixt the Siſters and Akerſound lyeth Shiphill, that is a Haven where men lade Spars and fat wares.

The Iland Akerſound men may ſayl round about it, to the northwards of it lyeth a great Bay or Sound, lying in farre within the Land, called Ottrom.

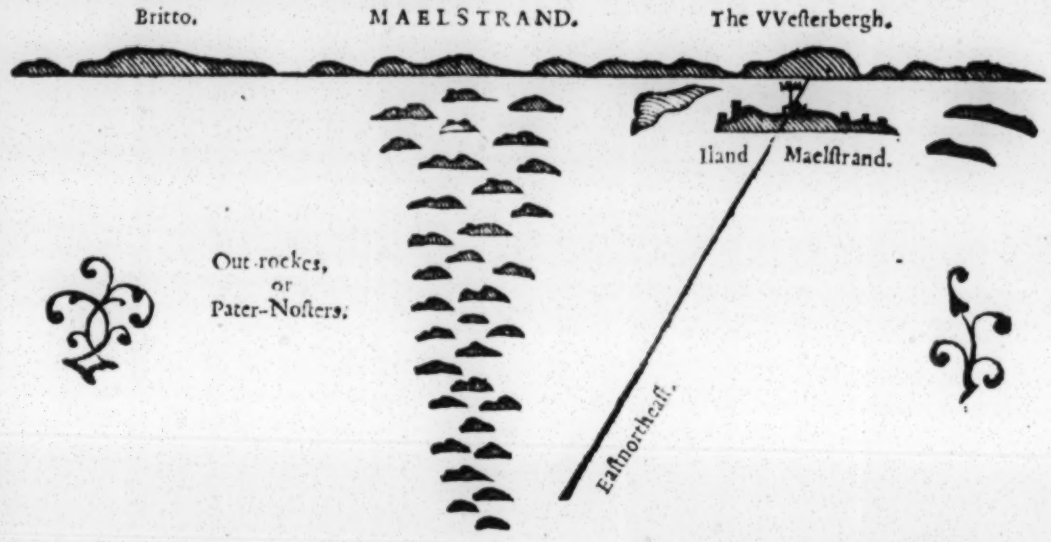
Ottrom.

To the ſouthwards of Ottrom lye Northerwixholm and Southerwixholm, 2 great Ilands, in a great ſound, which lyeth far and deep within the land, upon it (far within the land) lye many little townes, as Oldburgh, Oldwhat, Alleroes, and Dragens, from thence commeth much fat ware. Southerwixholm and the Iland Akerſound, lye northweſt and by weſt, and ſoutheaſt and by eaſt 5 leagues aſunder.

Norther-wixholm.

From Southerwixholme to Harmanſhead, the courſe is S. ſoutheaſt 5 leagues, betwixt them lyeth Boechſchaer, but two leagues to the ſouthwards of Harmanſound lyeth Kerckſound, Which is a great river, which lyeth in far within the Land.

Harmanſhead and the weſt-end of the rockes (which men do call the Paternoſters) lye north and by weſt and ſouth and by eaſt 5 leagues aſunder, to the ſouthwardes of them men do ſaile into Maelſtrand. Upon the coaſt betwixt Farder and Maelſtrand, is almoſt every where good anckorground in 35, and 40 fathom.



Pater-noſters.

THe Pater-noſters are a great rane of Rockes, which lye farre off to ſeawards from the Coaſt, behinde then, to wit, on the ſouth ſide, goeth in, within the land a broad ſound, upon the ſouth-ſide of it lyeth a great high round rock or hill, called Britto. To the ſouthwards of that ſound lyeth the Iland of Maelſtrand. He that cometh from the Scaw, and deſired to ſail to Maelſtrand, let him go on eaſtnortheaſt, and then he ſhall get ſight of the foreſaid hill Britto, which he ſhall ſet eaſtnortheaſt from him, and ſaile ſo in right with it, untill that he commeth by the Pater-noſters, he muſt leave on the ſtarboard ſide, and ſaile alongſt by them eaſtnortheaſt, and eaſt and by north, and then he ſhal runne in ſight of the Iland Maelſtrand, upon which ſtandeth a great ſtony beacon, or Warlock, where ſometimes ſtandeth a maſt with a barrell upon it, and ſometimes alſo there ſtandeth none. You may run in on both ſides the Iland, either about to the northwards, or to the ſouthwards of it, according as ſhall be beſt fitting for the wind: If the winde be at weſt or ſouthweſt, then you may beſt run in at the norther channell, or if the winde be at ſouth, or ſoutheaſt, then it is beſt to runne at the ſouther channell. The norther channell lyeth in by the ſouth ſide moſt eaſt and by ſouth, and e. ſ. eaſt, but the ſouther channel eaſt and eaſt and by north. When you come within the Iland, you may ſaile about by it, untill you come before the towne, which you ſhal ſe then lying before you. Men doe ankor there with an ankor to ſeawards out a head, & make faſt a cable out a ſtearne on the kaye, lying ſo wit the ſtearne to the ſhoare.

About the middeſt, going in at the ſouther channell, lyeth a rock above water, which you may ſail about on both ſides, but within that rock lyeth a ſuncken rock under water, and to the ſouthwards of it alſo a great rock, but a little further out then the other. There lyeth alſo a ſuncken rock under water by the Iland on the north ſide of the foreſayd rock which lyeth above water, which men muſt be very carefull to take heed of. There is every where good anckorground. From thence you may ſail through within the rocks to Calf-ſound, Bahouſe and Nilus.

Calffound

Calf-ſound lyeth diſtant from Maelſtrand about foure leagues. For to ſail in there out of the ſea, you muſt runne alongſt to the ſouthwards of a great rock, whereupon ſtandeth a Warder. On the ſouth ſide of the Havens-mouth there are great rocks, but on the north ſide all ſmall rocks. When you come within the rocks about the poynt of the northland, there you may anckor in 15 or 16 fathom, there is good anckor-ground. From Calfſound you may run up to the ſouthwards, through within the rock unto the river of Nilus.

Four leagues ſouthſoutheaſt from Calf-ſound, lyeth the Iland Winneu to the ſouthwards of it goeth in the channell of Nilus or Gottenbergh, which is a large and broad ſound, lying in n. n. e. in 8, 9, and 10, fathom, you muſt leave Winneu on the larboard ſide, and runne in betwixt the poynt of the main land, called Kalderhead, and the Iland little Denmarck, and then in alongſt by the main land on the ſouthſide untill paſt Elsburgh to Gottenburgh, it is there all cleane and cleare without any danger that might hurt you.

Gotten-burgh.

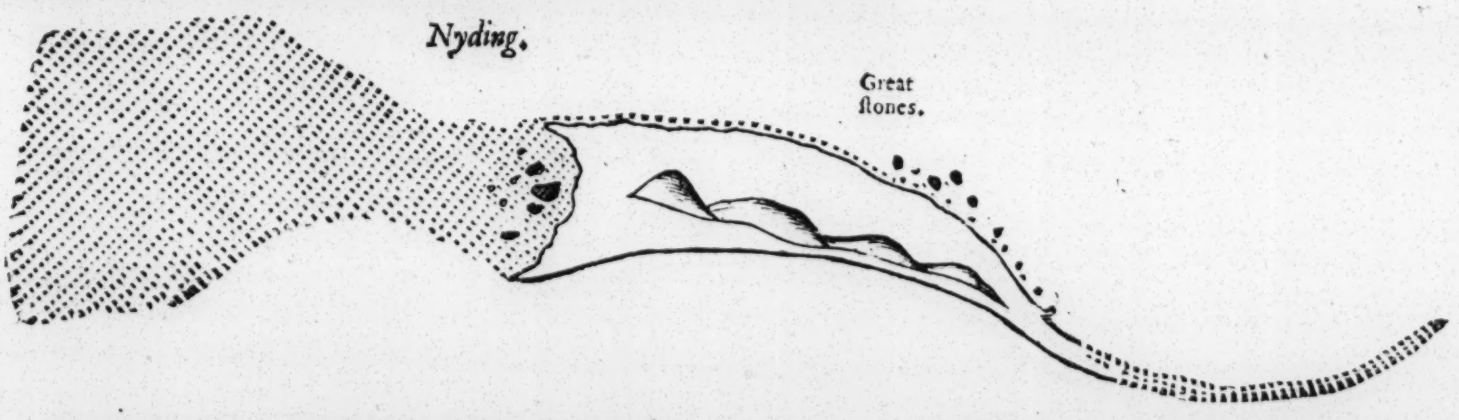
You may alſo ſaile into the northwards of Winneu, then you muſt leave Winneu, and alſo ſome long rocks on the ſtarboard ſide, and the through Iland or little Denmarck, on the larboard ſide, & then in alongſt by the poynt of the main land, on the ſouth ſide, as is before ſaid.

Two leagues ſouthſoutheaſt from Winno lye Maelſouud and Conſback: Maleſound is a rough Iland, which you may ſayle round about in ſeven or 8 fathom, under it is alſo good road. Two cables length weſtnorthweſt from Maleſound, lyeth a ſuncken rock under water, and alſo one even with the water, a bow ſhot from the land, whereupon ſtandeth a Warder.

Male-ſound.

Eaſtnortheaſt from Maleſound lyeth the haven of Conſback, there ſtand two great Warders, each upon a rock cloſe to the land, betwixt them lyeth in the haven, it is a fayre haven, ten fathom deep, and good anckor-ground, when you com about the low poynt you ſhall ſee Conſback lye to the northwards of you.

Conſback



From Maleſound ſouthweſt and ſouthweſt and by weſt, a great league to ſeawards, lyeth the fowle and dangerous rock Nyng or Nijding: The land upon Nyng is about a halfe league long. The riffe on the north end runnes till about a league on the land northeaſt, and is halfe a league broad, wholy riffe, with ſharpe ſtones. Upon ſome places 8, 7, 5, and 4 foot water. The taile, which ſhooteth ſoutherly downe, is narrouw, and runneth from the land northeaſt about 2 leagues: There upon is 5, 4, and 3 foot water. A league and a halfe without Nynger-Riffe, northweſt, men may ſtay upon 6, and 7 fathom. You may ſaile through betwixt Nyding and Maleſound, or the mayn land, but it is there all ſhallow water. Upon Nyding is a fire-beakon, whereupon they make fire every night.

Nyding.

From Nyding to Waterſbergen the courſe is S. E. 5 leagues, betwixt them (three leagues to the ſouthwards of Maleſound) lyeth Monſterſound, that is a river or Sound, which

Monſter-ſound. Waters-bergen.

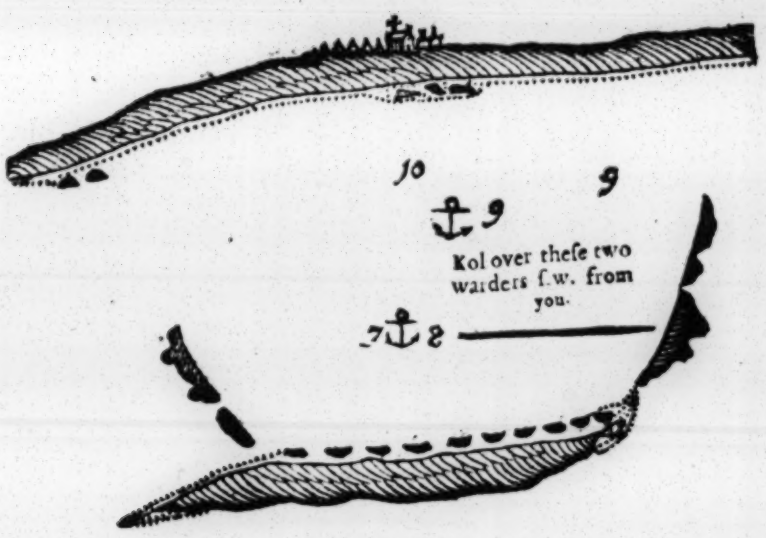
which runneth up into the land, upon it lye ſome towns as Vlymenes, Horn, and Goſewater. From Monſterſound three leagues to the ſouthwards, lieth Watersbergen. For to ſayl in there, you muſt run in by the eaſt land. At the point of the Iland which lyeth on the northweſt ſide before the haven, lieth a rock under water, and from the poynt where the caſtle ſtandeth upon, lieth alſo a ſunken rock, but which you muſt avoid; and therefore run in amidſt the channell, betwixt the foreſaid Iland and the mayne land, where the caſtle ſtandeth upon the poynt, and anckor when you come within the point right againſt the caſtle in 4 or 5 fathom. For to ſaile into Watersbergen by markes, you muſt bring Old boey to the N. ſide of the caſtle, and goe on N. N. E. there lieth a rock even with the water, which you muſt leave on the ſtarboard ſide, and anckor right againſt the caſtle in 4 or 5 fathom as before is ſaid.

Valckenburgh. Two leagues to the ſouthwards of Watersbergen lieth the river of Valckenburgh. On the north ſide of the Riversmouth

Tullo. lieth an Iland, called Murupting, and three leagues to the S. wards of it, lieth an Iland called Tullo, betwixt that Iland and Valckenburgh, within the land, lieth a high hill, called Haver, being whito to ſee to, as if it were ſandy Land: ſea fearing men doe name it yong Coll, becauſe of the likeneſſe of height and faſhion, which it hath like Col, and ſometimes it is miſtaken for Coll.

Helmſtee. Three leagues eaſtwards from Tullo, lieth Helmſtee upon a river, but there can go in no ſhips, but onely huyes & boates.

Laholm. Two leagues ſouthwards from Helmſtee lieth the little towne, or little caſtle, called Laholm, there goeth alſo a little river into the land. A league weſtwards from Laholme lieth Bosſtadt, theſe places lye in a great bay.



Swedereur.

Three leagues to the weſtwards of Bosſtadt lyeth the Iland Swedereur, you may runne in behind it at both ſides, for to anckor from the northwards, it is there large and broad for to go in: but from the north end of Swedereur ſhooteth off a little ledge of rocks, you muſt runne alongſt to the northwards off the rocks, that lye at the north end off Swedero, leaving them on the ſtarboard ſide, and anckor behinde the Iland, betwixt the great and little rockes in ſeven fathom, thwart of the little white church off Turcko, ſo that the greate rock with the two warders at the ſouth end be ſouthweſt from you, and Col ſtand over the foreſayd Rock, there it is beſt lying, and there you are landlockt for all winds. If you wil run out again to the ſouthwards off it, then leave the two rockes with the Warders on the ſtarboard ſide, and runne boldly cloſe about by them, towards Coll.

He that cometh off from Anout, and by reaſon off ſouther-lye windes can not run a weather Col, let him goe from Col northeaſt and by north towards Swedereur, and runne cloſe about by the two foreſaid rocks with the Warders, at the ſouth-end of Swedereur, untill he come behind the Iland, and anckor, as is before ſayd, there it is ſoft ground. A north winde bloweth there open in.

Coll. From Swedereur to Coll the courſe is ſouthweſt and by ſouth, betwixt both lyeth a greate baye, upon which lieth that little towne Enghelholme, where men alſo may ride.

For to ſayl from the Scaw to Coll.

From the Riffe off the Scawe to the Iland Leſou, the courſe is ſouthſoutheaſt, but the pointe of the Riffe and the Trindel lye due ſoutheaſt and northweſt eight leagues aſunder.

Leſou. The Iland Leſou is compaſſed round about with foule Dwaelgrounds, riffe and ſands, that lye off. From the ſouth-eaſtend where the Church ſtands upon, lyeth of ſuch a great riffe or ſhould from the ſhoare, that is about 3 leagues from the land to the ſouthwards of it, it is not deeper then two fathome, there under it you may make road for a ſouthſoutheaſt winde. Likewiſe from the S. weſt poynt, lyeth of ſuch a great ſhowld, that when the foreſayd flatt church is eaſt, and eaſtnortheaſt from you, you can not come neare the land within 3 leagues. But the north end you may come ſo near, that you may have rode under it for a ſoutherly and ſoutheaſt winde, in 3, 4, 5, 6, and 7 fathom, the church being about ſouth from you.

Riffe of Leſou. From the northeaſt end lyeth off alſo a riffe right towards the Trindel, which you may ſound about, when you ſayle through betwixt Leſou, and the Trindell, which is the nearer Leſou the ſhowlder, and the nearer the Trindell the deeper. Cloſe by the Trindel on the Inner ſide or weſt ſide, it is deepe five and ſix fathom.

Trindel. The Trindell is a ſtony ſand-plate, three cornerd, and ſomewhat long of faſhion, it is no more then four foot deep, and about two Akers of land great, and lyeth moſt alongſt the fareway, lying from the northeaſt end of Leſou northeaſt, or a little more eaſterly about 3 leagues diſtant. On the northeaſt ſide of the Trindell lyeth allways a great buy, whereby you may know it a farre off.

Depths about the Scaw. When the poynt of the Scaw is northeaſt and by weſt about a league from you, there it is ſeventeen and eighteene fathom deep, but when the poynt lyeth weſt, and weſt and by ſouth from you, about a league there it is 4 or 35 fathom deep.

But he that commeth ſayling about the Scaw, and runneth without the riffe in tenne, eleven, or twelve fathom, and goeth on from thence ſoutheaſt, or ſouthſoutheaſt, keepeth a long while ſtill, the depth of fifteen and ſixteen fathom, at leaſt the ſpace of three leagues, before he gette twenty, or five and twenty fathom. When as that you beginne to get againe ſhowlder water of tenne, eight, ſeven, and ſix fathom, that goeth then through within the Trindell. When that you ſhall meete with the foreſaid depth of the ſhowlding, and ſaile yet further on ſouthſoutheaſt, then you muſt be very carefull to uſe your lead often, becauſe of the foreſaid ſhowld, which lyeth off from the northeaſt end of Leſou towards the Trindell, you may run over it (as is ſaid) in five, foure, and ſo well (in the narrowe) in three fathom. When the northeaſt point of Leſou beginneth to come ſouthſouthweſt from you, then you come on againſt the riff or ſhowld, but when the poynt is ſouthweſt from you, then you are over the ſhowldeſt off the riffe. When the weſt end of Leſou is ſouthweſt, and the church ſouthweſt and by ſouth from you, then you are about thwart of the buye of the Trindell.

The Helmes. Four leagues ſouth and by weſt from the Scaw lye the ſmal-Helmes, not far from the ſhoare, that are three little Ilands, the ſouthermoſt the Iuttes doe call the Deyen or the Dee, the midlemoſt Holmes, and the northermoſt Graſholme by them lyeth yet another little Iland. You may ſaile through between the ſouthermoſt and the middlemoſt, but then you muſt runne neareſt the ſouthermoſt, through betwixt them is four fathom water.

Under the Helmes is good road for ſoutheaſt, ſouthſoutheaſt and ſoutherly windes. He that will go to anckor under them, comming from the Scawe, muſt runne to the ſtrand in three fathom, and runne ſo alongſt by it, in betweene the ſtrand and the Helmes, untill that he be within the rocks, there he may anckor, or alſo well runne through alongſt by the footſtrand in 3 fathom. When the rockes of the Helms are eaſt, and eaſt and by north from you, there is the roade in 4 fathom, and 4 fathom and a half. The beſt road for to ly under the Helms with ſmall ſhips, is betwixt the ſouthermoſt and middle moſt little Iland, ſomewhat nearer the main land then the Ilands: but for great ſhips it is beſt to lye by the Graſholme.

He that will not lye ſo far within the Helmes, may alſo anckor farther out under the high land of Lacklou, ſo that the Helms be ſoutheaſt from him, in four, five, or ſeven fathom, there it is alſo very good lying for ſouth and ſouthſoutheaſt windes, in clean ground, of ſmall white and black ſand.

Betwixt the Scawe and the Helmes in the fareway it is deep eighteen, ſixteen, and fifteene fathom. Betwixt the Helmes and the maine land, there is at the ſhowldeſt three fathom water. When you come from the northwards through betwixt them untill you come thwart of the ſouth end of the rockes, there runneth off a little riffe from the Helmes towards the ſtrand, where the great ſtones lye called Bourſer riffe, but keeping in three fathom, you can not take hurte of that riffe. You may well run out againe by that ſouth end towards Zeabuy. So that you may ſayl round about the Helmes with ſhippes that are not of very great draughts.

Betwixt the Helmes and Leſou, a good wayes from the

Helmes, it is 20 and 25 fathom deep, ſoft ground, but one league from the Helms lye ſome rocks or ſhowlds, where of you muſt take heed.

Dwael grounds.

To the weſtwards of Leſou lye the Dwaelgrounds, to the northwards of the foreſayd riffe, that lyeth off from the S. W. point of Leſou, where the flat church ſtandeth upon, which are very uneven of three, four, five, and ſixe fathom deep. Of theſe and more other ſhowlds and uneven grounds, betwixt Leſou & Zeabuy, reade the deſcription off the norther part of the Belt.

Rockes betwixt Leſou and the Holms.

About a league northnorthweſt from the weſt end of Leſou, S S.E. ſomewhat ſoutherly from the point of the Scaw, and eaſt ſoutheaſt from the little Helmes, there lye two or 3 little low Ilands or rocks, a little above water; betwixt theſe Holmkens, and the Helms, it is twenty fathom, but betwixt theſe Holmkens and Leſou 5 fathom deep, to the northwards of them is farre flat, toure and five fathom deepe ſand-ground.

If you will ſayl by night off from the Helmes or from the high land of Lacklie towards Leſou with a ſouthweſt or ſouthſouthweſt winde, then ſayle no nearer becauſe of theſe little Ilands and ſhowlds then ſoutheaſt and by eaſt, with that courſe you ſhall runne over thoſe ſhoulds or flats (lying to the northwards from the foreſayde Holmkens) in ſix or ſeven fathom, afterwards it wil be deeper again, nine, ten, and twelve fathom, go then on eaſtſoutheaſt ſo long untill that the eaſt end of Leſou be S.W. from you. When that eaſt end beginneth to come ſouth and by weſt from you, then you come on againſt the flat, or rif, which ſhooteth of from the northeaſt end of Leſou towards the Trindell. It doth ſhowld up from 14, 12, and 10 fathom, unto 8, 6, and 4, and alſo to 3 fathom. If you be ſomewhat near to Leſou, the three fathom laſteth a good whiles, and then it will be again deeper, four, ſix, tenne and fifteene fathom, and then verie deep. When that foreſayd northeaſt end of Leſou is S.W. from you, then you are cleare of that flat. The Helmes and the Trindel lie eaſt and by ſouth and weſt and by north ſeven leagues aſunder.

For to ſayl within the Trindel.

When you come from the Scaw with a ſouthweſt or weſtſouthweſt winde, and that you wil ſail through within the Trindel, that is, betwixt the Trindel and Leſou, it is beſt that you goe ſuch a courſe, that you may make your wayes good ſoutheaſt and by ſouth, and then you ſhal run alongſt about the midſt of the channell, through betwixt the Trindel, and the foreſayd low rocks, (which lye northnorthweſt off from the northpoynt of Leſou, and ſouthſoutheaſt from the poynt of the Rif of the Scaw) At the deepeſt in this farewaye, betwixt the Scaw and Leſou, it is 23 and 24 fathom, being paſt over that, you ſhall come againſt a banck of eight, ſeven and ſix, and alſo into five fathom, and then you ſhal be about due weſt, or a little more northerly or ſoutherly from the buye upon the Trindel. Afterwards it will be again deeper, if you be in the right fareway, to wete, 7, 8, 10, and alſo wel twelve fathom.

For not to ſayl within the rif, or the northeaſt poynt of Leſou, it is good to run then ſomewhat more eaſterly, to wete, ſoutheaſt, or ſoutheaſt and by eaſt, untill you come againſt the foreſayd riff that lyeth off from the northeaſt poynt of Leſou, which you may ſound, and ſo runne about by it in five, four, and alſo three fathom. When the northeaſt poynt of Leſou, (that is the poynt with hommocks) is ſouth and by weſt from you, then you come againſt the riff, and when that poynt is S.S.W. from you, then you are right thwart of the rif, but when the poynt is S. W. from you, then you ſhall be paſt and cleare of the rif. Being gotten about it towards Anoute, it will be deepe thirtie, five and thirtie and alſo forty fathom.

He that commeth by night about the Trindell, muſt not ſpare his lead, on the outer ſide, that is on the eaſt ſide of the Trindly you may not come no nearer it by night, then nine or tenne fathom, and then you ſhall not be farre off from it.

When you ſayle cloſe alongſt without the Trindel in cleare weather, and that you ſtand without board, upon the bendes of the ſhippe vvith your feet by the vvater, then you can even ſee Leſou. If that then in cleare vveather ſtanding ſo vvithout the ſhip, you can not ſee Leſou, vvhen you are about thvvart of the Trindle then you runne farre enough alongſt vvithout the Trindle.

Depths betwixt Anout and Leſou.

The Trindle and the riffe of Anout lye northvveſt and ſoutheaſt, or as ſome ſay ſouthſoutheaſt and northnorthvveſt, nine or tenne leagues aſunder. Betvvixt Anoute and Leſou in the right farevvaye it is five and twentie fathom deep, but to the vveſtvvards of it, to vvit, right betvvixt the Ilands Anout and Leſou it is ſhould vvater, of ſeven and eight fathome, you may ſayle there over theſe flats and ſhovvlds through betvvixt Anout and Leſou into the Belt.

Anout is upon the vveſt ſide very foule, and farre of to ſeawards from it, lye many uneven dwaelgrounds, of two, three, and four fathome.

When you ſail with a ſouthweſt or weſterly winde from Leſou to Anout, and runne over the flat of Leſou in three or four fathome, you neede not ſayle on more eaſterly then ſoutheaſt and by eaſt, although it be by night, you ſhall with ſuch winde and courſe run cleare enough of Anout. When as that you reckon to have the length of the riffe, goe then on ſouthſoutheaſt, and ſouth and by eaſt, for to ſail a wether of Coll. But by day or when you can ſee about you, not more leewardly then ſouthſoutheaſt. When you ſaile off from the foreſayd point of Leſou to Anout with a ſouthweſt or weſtſouthweſt winde, as is before ſaid and make reckoning to come by night by Anout, then you can not doe better, as to goe eight, tenne, or twelve glaſſes, (according as the winde ſhall blow freſh) on ſouthſoutheaſt, until you come againſt the ſhowlding of Anout, and looke for the daye, that running not to far to leewards off the poynt of the riffe, you may the better gette a weather of Col. Likewiſe, when you come off from Coll with a ſouthweſt or ſoutherly winde, and runne about a halfe league alongſt without Coll, you neede not alſo ſaile more northerly, then northweſt and by north, that goeth alſo a good wayes alongſt to leewards of Anouts riffe, and ſo forth towards Leſou. But when you come with a northeaſt winde out of the Sound, or from Col, you muſt runne out cloſe by Coll, if you will ſail a weather of the riffe of Anout.

He that muſt lye by or turne to windwardes betwixt Leſou and Anout, and is bound for the Sound, let him keepe himſelfe on the weſt ſide of the farewaie, when he is a league or two a weather of Leſou, upon thoſe foreſaid flattes, or foure, ſixe, and ſeven fathom, when as that he beginneth to come within a league or two of Anout, there it will be again deeper, but uneven the one caſt at leaſt a fathome more or leſſe then the other, when that you ſhall begin to get that uneven ground of ſixteene, twentie, and alſo thirtie fathom, then is Anout yet about three leagues ſouth from you; comming neare Anout it wil be verie uneven, at one time thirtie, and then ſoone againe fifteene, 17, and alſo 20 fathom.

If you will ſaile towards Leſou with a ſouthweſt winde, coming about the riffe of Anout from the ſouthwardes, then goe not on more weſterly then northweſt. If you goe on more weſterly, eyther weſtnorthweſt, or northweſt and by weſt, then you ſhall come ſoon upon the flatte betwixt Anout and Leſou, and ſhall finde firſt tenne, and then by little and little, 6, 5, and 4 fathom. When that with the northweſt way you beginne to gette Leſou in ſight, then it lieth high, that is, the weſt ende about weſtnorthweſt, and the northeaſt ende, where the riffe lyeth off, about northnorthweſt from you. When you come ſo neere to Leſou, that you can ſee the eaſt end out off the toppe in cleare weather, about northweſt from you, there it is thirtie, and 34 fathome deepe, that laſteth ſo long untill that the foreſaid eaſt poynte be ſouthweſt from you, but when that poynt is ſouthſouthweſt from you, then you are right thwart or upon the pointe or ſhowldeſt off the riff, then you ſhal runne over there in three, 4, 5 fathom: When that foreſaid point commeth to be ſouth and by weſt from you, then you are paſt and cleare of the riffe.

Depths by Leſou.

Betwixt Anout and Waesbergen in the farewaye it is deepe one and twentie, two and twentie, and three and twentie fathome, betwixt them lyeth alſo a banck of ten, twelve, 14, and fixteene fathom. When the northermoſt high hil of Waesberghen is northeaſt from you, then the poyntes off Anoutes riffes is ſouthweſt from you: but when that hill is northeaſt and by eaſt from you, and that you be ſomewhat nearer Norwaye then the riffe, then you are upon the banck. When you come upon it by night, then goe on ſouth, or ſouth and by eaſt, according as the winde ſhall bee, and then you ſhall get againe deeper water. There lieth yet another banck betwixt the riffe of Anout and Valckenburgh, which lyeth alongſt unto Haland, which at ſome places is not deeper then eight fathom. When the pointe off the riffe is about ſouth and by eaſt, and the high land of Anoute is about S. and by weſt from you 4 leagues, there lyeth alſo a banck off 14 or 15 fathom.

Depths thwart of Anout.

The riffe off Anout lyeth off from the northeaſt point off Anout about eaſtnortheaſt a league and a halfe into ſea, and at the end lieth drye above water, which is exceeding ſteepe and needle too. The north ſide (when you come from the northwards or the weſtwards) you may ſound, and runne alongſt by it in 17, or 18 fathome: but comming from the ſouthwards, you can not (in no wiſe) come neare it by your lead, for on the ſouth ſide cloſe to the Riff, it is thirtie and five and thirtie fathome deep.

Riffe of Anout.

On the north ſide off the riffe, you may anckor at many places

Road under Anout riffe.

places in tenne, eleven twelve, and thirteen fathom. When you anckor in eleven, twelve or thirteene fathom, ſo that the Fire-beacon be ſoutheaſt and by ſouth, and the high land of Anout, which is the weſt end, about ſouthweſt and by weſt from you, then lyeth the outermoſt end of the riffe eaſt and by north from you, there is very good lying for eaſtſoutheaſt, ſoutheaſt, ſouth, and ſouthſouthweſt windes. When you ſet ſayle from thence, and are bound to the Sounde, then you may boldly without feare (either by night or darke weather) ſail alongſt by the riffe in ſixteen, ſeventeen or eighteene fathom, untill thwart of the ende, keeping in ſuch depth you can take no hurt of it. Comming by the end, it is four & twenty & five and twenty fathom deepe, but when you com about the poynt, and beginne to goe on ſouthſoutheaſt, then you have preſently cloſe to the riffe no ground in thirtie and five and thirtie fathom. The riffe of Anout and Col lye one from the other ſoutheaſt and northweſt about tenne leagues aſunder. In cleare weather you may eaſily ſee from belowe both Col and Anout, when you are betwixt them both. For to ſayle from the riffe to the Sound with a weſt ſouthweſt winde, you neede not ſayle nearer with a ſhip that ſayleth wel, then ſouthſoutheaſt, with that courſe you ſhall ſail farre enough a weather of Col. Coming neare the coaſt of Zealand, that you may ſound in fourteene, twelve, tenne, and eight fathome deepe.

Depths betwixt Anout riffe and the ſound.

Betwixt Anout and Zealand, in the fareweye it is eighteene and twentie fathom deepe. Betwixt Anout and Zealand fifteen and ſixteen fathom, but in the fareweye betwixt Anout and Coll, it is deepe twentie, one and twentie, two and twenty, and three and twentie fathom. To the ſouthwards of the weſtwardes of it, it is ſhowlder, to wete, nineteene, eighteene, and alſo wel fourteene, thirteene, and 12 fathom, according as you come to the weſtwards, but towardes Norweye it is deeper, to wete, four and twenty, five and twentie, eight and twentie and alſo thirtie fathom, whereby you may perceive wether you be neareſt the Norway ſide to the eaſtwards of the fareway or to the weſtward.

Divers Bancks.

About northweſt from Col four leagues, and ſoutheaſt and by eaſt from Anout, there lyeth a banck of nine, tenne and twelve fathom.

About eaſt and by ſouth from Anout, ſo far that you can not well ſee it from beneath, but you may ſee out of the top, and northweſt from Coll, there lyeth alſo a banck of ſixteene fathom, groſſe ſand ground, as if it were ground of the riffe.

Lowſegrounds.

South and by eaſt about eight leagues from the poynt of Anouts-riffe, ſoutheaſt and by ſouth from the ſouth end of Anout, and weſt and by north from Coll about 5 leagues, lye the Lowſegroundes, upon which is no more then eight foot water. He that commeth off from Anout riffe, being bound for the Sound, and goeth not more ſoutherly then ſouthſouth-eaſt, ſhal not ſayle within theſe grounds, but with a ſouth and by eaſt courſe he ſhould fall with them. He that cometh out of Sound, being bound towards Anout, ſhould (with a W. N. W. courſe off from the Sound) alſo ſayle within the ſame therefore he that is bound with a bare winde from Anout to the Sound, or from the Sound to Anout, muſt be carefull thereof.

Haſelin.

The Iland Haſelin lyeth from Anouts riffe ſouth tenne leagues diſtant, and from Coll ſouthweſt and by weſt eight leagues, which is on the north ſide or outer ſide verie foule, full off riffes and ſhoulds, but on the ſouthſide or inner ſide towards Zealand it is indifferent clean, ſo that you may wel have roade there. From the eaſt end of Haſelin lieth off a Riffe northnorth-eaſt and northeaſt and by north towardes Norwaye three leagues into ſea, untill within a league near to the Lowſegrounds: he that muſt turne to windewards here, with ſoutherlye or northerly windes, and runneth ſomewhat far over weſtwards into the bay, muſt be very carefull, and take heed there of, becauſe it is thereabouts very uneven of depths, and uneven grounds, and therefore you can not well come neare then by your lead; but the Coaſt of Zealand you may come neare in ſix or ſeven fathom by your lead.

Depths in the Scawe reach.

If it ſhould happen that you muſt lye by, in the Scawe reach in long darke nights or miſtie whether, then obſerve theſe directions following: If you be betwixt the Scavve and Leſou, then you may keepe your ſelf vvell bouldly to the ſouthvvards or vveſtvvards, but uſe the lead much: about the Helmes and the Schavve you may come neare the ſhoare into ten, 12 or 15 fathom, before you need the caſt about. If you be by your reckoningh thvvart of Leſou, you may come neare it in ten or 15 fathom. But if you be betvvixt Leſou and Anout, there you may runne upon the flats in five, ſix, ſeven, eight or tenne fathom. If you be betvvixt Anout Haſelin and Coll, there you may runne to the ſouthſhoare in fifteene and ſixteene fathom, but betvvixt Haſelin and Zealand in ten or tvvelve fathom.

It is beſt in anie wiſe to keepe you rather to the ſouth ſhoare, then to the Norvvay ſide, but you muſt be verie carefull of your lead, and uſe it very much.

Of the tydes and courſes of the ſtreame.

In the Scawe reach, betwixt Maelſtand and Waterf bergen the ſtreame goeth moſt ſtill with the winde and it rippleth there ſometimes in ſome places, as if there were ſhowlds, this you may finde in calme weather, if you let a lead ſinke to the ground.

By the Scawe the ſtreame commeth moſt commonly falling out at the Bele towards the land of N.E. eſpecially when the winde hath blown a while out of the eaſt or N. eaſt, and runneth alongſt by the Norwaye too the northwardes.

Men comming of from Anout, that wil ſayle by night with a weſterly winde, towards the Scawe: or comming from the weſtwards about the Scaw, with a ſoutherly wind, being bound for the Sound, might ſoon be carried with this current under Norway, a good whiles before they ſhould thinke a feare of it. Of this current read further in the fifft booke.

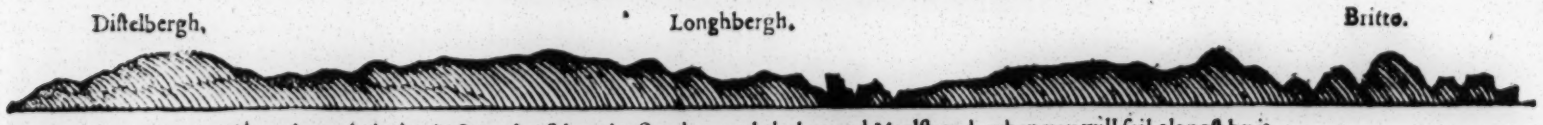
In this fareweye betwixt the Scawe and the Sound, and then from the Sound untill about Falſterborne, it is exceeding neceſſarie, that a Pilot (or he to whom the charge is commited) be verie carefull in looking out, and be very vigilande, that he may avoyde the multitude of daungers, of ſhowldes and riffes lying there: the skilfulleſt and beſt experienced of all hath there enough to doe.

Courſes and Diſtances.

From Akerſound to Southerwyksholme ſoutheaſt and by eaſt	5 leagues
From Southerwyksholme to Harmenshead ſouthſoutheaſt	4 or 5 leagues
From Harmanshead to the weſt end of Paternoſters	5 leagues
From the weſt end of the Paternoſters to the Maelſtrand the courſe is E. N.E. 2 leagues	
From Maelſtrand to Winneu ſoutheaſt	5 leagues
From Winneu to Maelſound ſouthſoutheaſt about	2 leagues
From Maelſound to Waersberghen ſouthſoutheaſt	5 leagues
From Waersbergen to Tuvlo ſoutheaſt	5 leagues
From Tuvlo to Laholme ſoutheaſt and by eaſt	5 leagues
From Laholme to the poynt of Turko behinde Swedereur the courſe is weſt-ſouthweſt	3 leagues
From Turko to Enghelholme ſoutheaſt	4 leagues
From Enghelholme to Coll weſt	4 great leagues
From Maelſtrand to Nyding ſouthſoutheaſt	8 or 9 leagues
From Maelſound to Nyding the courſe is ſouthweſt and ſouthweſt and by weſt a league and an half	
From Nyding to VVaersberghen ſoutheaſt about	5 leagues
From VVaerſberghen to Coll ſouth and by eaſt	12 leagues
From the ſouth end of Swedero to Coll ſouthweſt	4 leagues
From the riffe of the Scaw to Maelſtrand eaſtnortheaſt	13 leagues
From the riffe of the Scaw too Nyding ſoutheaſt and by ſouth	16 leagues
From the Riffe of the Scawe to VVaersbergen eaſtſoutheaſt	23 leagues
From the Riffe of the Scawe to Coll alongſt without the Trindle S.	30 leagues
From the Riffe of the Scawe to Leſou ſouthſoutheaſt	8 leagues
From the Riffe of the Scawe to the Trindell due ſoutheaſt	8 leagues
From the Trindell to Anouts riffe ſoutheaſt, or as ſome will ſaie ſomewhat more ſoutherlye	9 or 10 leagues
From Anoutes riffe to Coll it is right ſoutheaſt	10 leagues
From Anouts riffe to Haſelin ſouth	10 leagues
From Coll to Haſelin ſouthweſt and by weſt	8 leagues
From Coll to the northermoſt out-poynte of Zealand ſouthweſt	5 leagues

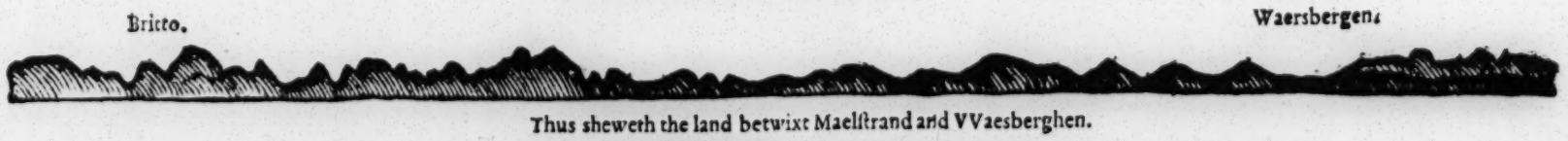
How theſe Lands doe ſhew themſelves at Sea.

Diſtelbergh. Longhbergh. Britto.



Thus ſheweth the land of Northeaſt betwixt Southerwycksholme and Maelſtrand, when you will ſail alongſt by it, being foure leagues without the land.

Britto. Waersbergen.



Thus ſheweth the land betwixt Maelſtrand and VVaesberghen.



Thus ſheweth the Land of VVaersberghen, when you ſaile alongſt by it, from Anout into the Sound.



Thus ſheweth Anout, when you ſayle of from Leſou.



Thus ſheweth Leſou when you ſaile from the Scawe towards it.

The

The ſixth Demonſtration,

In which Are ſeth forth the North coaſts, between Aker-ſound and Schaerſound, and from Schaer-ſound to Schuytenes.

THE Longſound is one of the faireſt havens of all Norway, and lyeth northnortheaſt from Iofferland diſtant one great league. Before old Longſound lyeth a high round rocke, whereupon ſtandeth a great round Warder, for knowledge of this haven. Coninxhaven that is the ſouthermoſt or weſtermoſt channell of the Longſound, and goed in betwixt the weſtermoſt through poynt and Conings Iland, and then men run alongſt to the eaſtwards of the Baers, which lyeth off from the foreſayd rough poynt. For to ſayle in there, you muſt run in amid channell: and anckor in the Coningſhaven in 28 and 30 fathom.

Coningshaven.

For to ſayle into the Neſſe, that is on the north ſide behinde the eaſtermoſt poynt of Longſound (you muſt run through betwixt the great rock, whereupon the Warder ſtandeth, and the land of old Longſound, leaving the foreſayd rocks on the ſtarboard ſide, and ſo alongſt about that rough Iland, untill you come into the Neſſe, which lyeth behinde a chindle ſtrand, there you ſhall lye under a chindle of rockes like red ſand: There lye alſo ſome little rockes thwart of that chindle. This is a good handſoom haven, and light for to come into, there it is 24 and 25 fathom deep.

The Neſſe.

A league to the eaſtwards of the Neſſe, or eaſt poynt of the Longſound, lyeth Stavange, that are ſome out-rockes, where men may ſayle within on both ſide, to the eaſtwards of it lyeth the ſound of Laerwyck.

Stavange.

The Laerwyk is a great broad Sound, where are many Bights and Lade-places, where men may lye and lade Firretimber. From the eaſt poynt lyeth off a great rane of rocks a good wayes off ſoutheaſt and by eaſt into ſea, and run in almoſt halfe the Sound, called the Laerwykes Swines, where of men muſt take heed. Within in this Sound it is flat water and ſhould, ſo that farre within no great ſhips can lye a float.

Laerwyke.

From the Laerwyck unto the Iland Farder the courſe is eaſtnortheaſt foure leagues, betwixt them both lyeth the litle towne Tonsbergen in a great Bight. And from Farder to the Iland Baſt the courſe is north and by weſt five leagues, betwixt both lyeth a fowle poynt. To the ſouthwards of Baſt lyeth Markenboet, and the Bight of Aſko, but to the northwards of Baſt lyeth Lowſound.

Farder.

Baſt.

From the Iland Farder to the Soen-water, the courſe is north, but from Baſt north and by eaſt. The Soen-water lyeth in moſt north. Upon it lye many havens and lade places, moſt on the ſtarboard ſide as you come in. Firſt there is Mos-ſound, a haven that goeth up to the eaſtwards, & then there is Wykeſtee, which is a bight behind an Iland, afterward Shiphill, a ſandbay and a very good road, that goeth ſo up alongſt to the northwards into Anſlo, and then it runneth about to the ſouthwards into the Bottom.

Soen-water.

Wyckſtee. Ship-hill.

When you ſayle from Farder or Baſt unto Soen-water, you ſhall meet with a red poynt, betwixt the Soen-water and the Copperwycke. He that is bound into Soen-water muſt run alongſt to the eaſtwards of it, but he that is bound into Copperwyke muſt goe up alongſt to the weſtwards of it and leave it on the ſtarboard ſide. When that you come within the Lams, you ſhall eſpie a little Church upon the weſtland, there is the lade place of the Copperwyke, you may ſayl up from thence to Brakenes. On the north or eaſt ſide lieth Holmſound, from Farder to the poynt of Roge the courſe is northnortheaſt 5 league. At the eaſt end of Roge you may anckor, there is a plain ſtrand, you may run through betwixt the Roge and the Calf, but anckor under Fletto, then you muſt run through within the two ſmall rocks.

Copperwyke.

Roge.

The Siſters.

From Baſt unto the Siſters the courſe is ſoutheaſt five leagues. Behind the Siſters to the ſouthwards of the poynt of Roge, lyeth the haven of Elffang, diſtant from the Iland Farder northeaſt and by eaſt 5 leagues. When you come of from Farder, you muſt run through within the rocks, which lye within the Siſters, untill you come againſt the land, there you ſhall find a great gray rock, which you muſt leave on the larboard ſide, and the ſmall rocks that lye there within on the ſtarboard ſide, and then alongſt about by the weſtland, & then the haven opens it ſelf, which is narrow, and within flat and ſoft ground.

From the Naze (that is the ſouthermoſt poynt of Norwaye on the north ſea) weſtwards, the coaſt lyeth ſomewhat alongſt by the land of Leeſt, weſtnorthweſt, but to the eaſtwardes of it (alongſt without the rockes untill paſt the Iland Fleckerie) eaſtnortheaſt about tenne leagues. From thence along northeaſt unto the Longſound about ſixteen leagues. This coaſt is al alongſt of high ſteepe ſtonie hilles, & without it ful of manie rockes verie ſtrange to behold, but it hath manie faire deep havens, with verie good anckorground, where in great abundance of timber and boards laden. The firſt Havens to the eaſtwardes of the Naze, is called the Kloof or the Cowe & Calfe, after two high hommockes, good to be knowne, the one ſomewhat greater then the other, which lye within the Haven upon the high land, and are ſo called by the Dutch Schippers. He that will ſayle into this Haven comming from the weſtwardes, ſhall meere with a greate rock ſomewhat to the eaſtwardes of the Naze, called Melyn, whereupon is a Warder, being paſt that he ſhall find another outrock, whereupon ſtandeth alſo a Warder, called Sparrels. Betwixt theſe two outrockes, he muſt runne into this haven the Kloof. When he commeth againſt Sparrels, there lyeth a ſuncken rock under water, where of the muſt take heede. Somewhat within Sparrels lyeth an other Rock in the farewaye, but above water, which he muſt leave on the larboard ſide. In ſayling in ſo, in the haven doth open it ſelf, by little and little, and ſo ſhall come againſt the Kloof: being come within it, the muſt edge up to the weſtwards, about the poynt, and anckor there in a ſand baye, in fifteen or ſixteen fathom, ſo that the two foreſayde hommocks the Cowe and the Calfe ſtande about northeaſt from him.

The kloof Cowe and Calf.

A little to the eaſtwards of Sparrels lyeth a haven called Scarſound, or Weſtryſen, for to ſayle in there, you muſt leave Sparrels to the weſtwards on the larboard ſide, and all the great Holmes or rocks to the eaſtwardes on the ſtarboard ſide, and runne ſo inwards untill you come into the haven.

Scarſound

Four leagues to the eaſtwards of Scarſound, lyeth the Iland Holyſound, whereupon ſtande two greate Warders, you muſt ſayle in to the weſtwards of Iland, untill that you be within it, and anckor under the foreſayd Iland. Thwart of it runneth in a great Sound, into the land, where you may ſayle in, and where manie ſhippes lade.

Holy-Sound.

About three league eaſtnortheaſt from Holyſound and eight leagues to the eaſtwardes of the Naze, lyeth the haven and Iland Fleckerye, you may ſayle in at both ſides of the Iland, as well from the weſtwardes, as from the eaſtwards into the haven of Fleckerie. The weſtergat lyeth in northnortheaſt. When you com of from Holyſound then you ſee open into the Sound, you muſt ſayle alongſt by the Rockes without Holyſound, untill you come within the Iland Fleckerie, and edge the weſtwards towards the land, untill you come within the Dieveholme, where the Gallowes ſtandeth upon, and anckor by the weſt land, in fifteene, ſixteene, or twentie fathome: You muſt bring out there an anckor a head, and make a cable faſt on the rocks upon the land. You may runne from thence to the eaſtwards of the Iland Fleckerie, out againe at the Eaſter-gatte eaſtnortheaſt into ſea, and then you muſt leave the little Iland within the Warders, which lyeth at the eaſt end of the Iland Fleckerie, with all the greate rockes by it on the ſtarboard ſide, and all the black holmes on the larboard ſide.

Fleckerie.

The weſtergat off Fleckerie.

The Eaſter-gatte of Fleckerie goeth in weſtnorthweſt, betwixt the Iland Fleckerie and the poynte of Ranſound. When you come before it, you may ſee open in the Voſſe. For to ſayle in there, you muſt leave all the black rocks thwart of the poynt of Ranſound on the ſtarboard ſide, and the greate graye rockes with the little Iland, where the Warders ſtand upon, on the larboard ſide, when as you come then by the fornamed Dievenholm, you muſt runne to the weſtwards of it into the Sandbay, and anckor there, as is before ſaid.

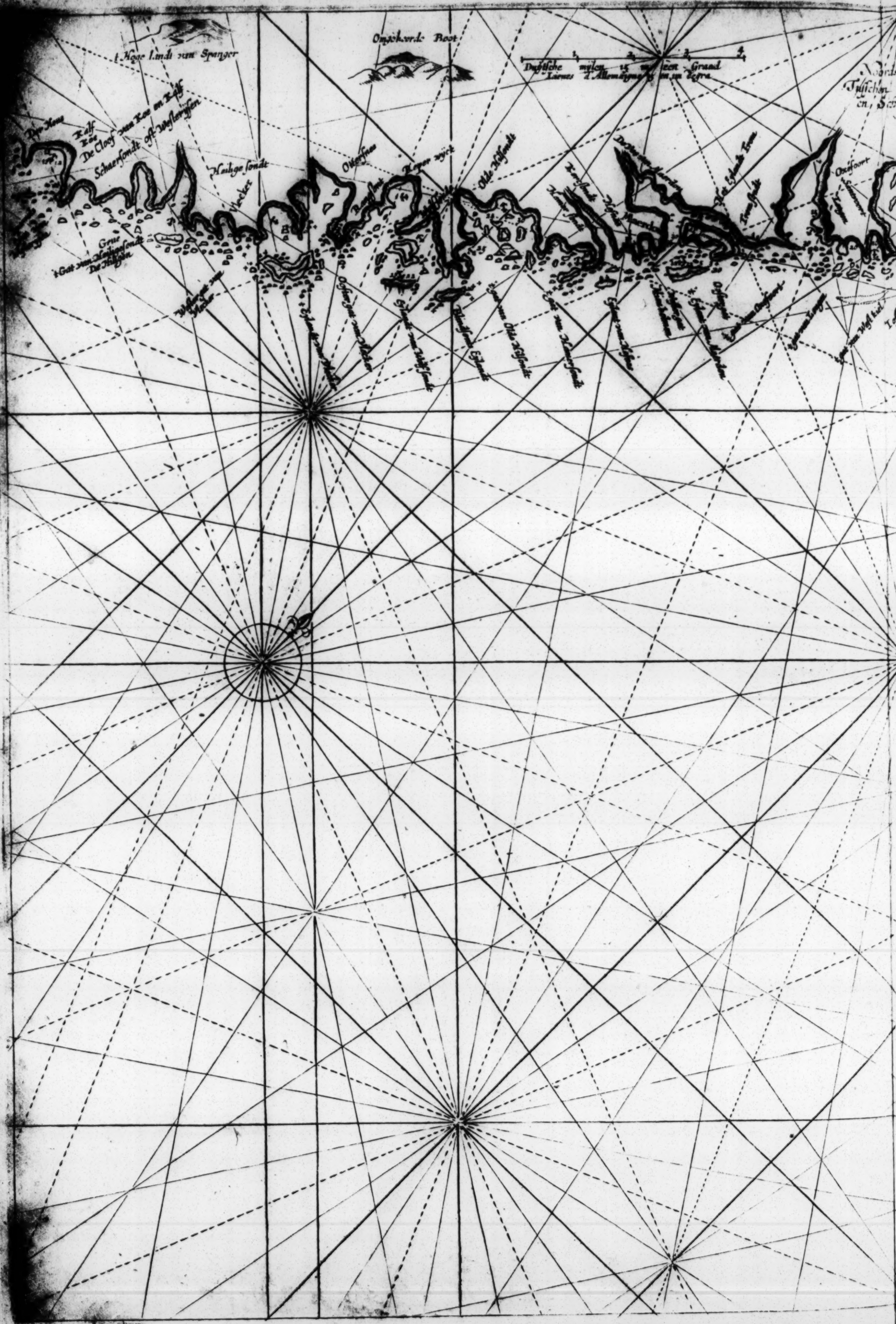
The eaſter gatte.

When you are thwart of the Eaſter-gatte of Fleckerie, then there lieth right thwart from you within the land a high round hill, which men doe call the Boate turned up ſide downe, which lieth out above all the lands thereabouts, and comming from the weſtwards againſt Fleckerie, there ſhewe alſo three high double land, which by little and little ſeeme to goe to nothing towards the Drommels.

Three leagues to the eaſtwards of Fleckerie lyeth Reperwyck, a broade and wide Sound, lying in north, and north and by weſt. For to ſayle in there you muſt runne in by the land of Wolf-ſound (lying on the eaſt ſide of this haven) leaving all the rocks (and alſo where the maſt of Wolf-ſound doe ſtand upon) on the ſtarboard ſide, and all the rocks of Ran-ſound on the larboard ſide, untill that you come to the end, or within in the haven, and then you muſt edge up to the weſtwards about the poynt, and anckor there, that is a good haven for ſhips that are bound to the weſtwards.

Reperwyck.

On the


Omb.vrd. Roost
Hoge Lindt vun Spanger
Deutsche meilen
Graad
Hoge sondt
Olde Hsondt
Ostersnu
Oostsnu
Oostsnu vun Olde Hsondt
Oostsnu vun Hoge sondt
Oostsnu vun Westsondt
Westsnu vun Hoge sondt
Westsnu vun Olde Hsondt
Westsnu vun Westsondt
Oostsnu vun Nordsondt
Westsnu vun Nordsondt
Oostsnu vun Ostersondt
Westsnu vun Ostersondt
Oostsnu vun Westsondt
Westsnu vun Westsondt
Oostsnu vun Ostersondt
Westsnu vun Ostersondt

Cuſten
Akerſondt
Akerſondt
Dogſtad
Dogſtad
Oſtadt
Oſtadt
Oſtadt

Les Costes Marines
de Norwegue depuis
Akersant jusques à Schnijte

Stiernsund

Stafangen

Dyfiorden

Skudesund

Skudesund

Claus Bock

Skudesund

N O O R

Vgerwyck

Schermoy

Vgerwyck

Vardehuus

Vardehuus

Vardehuus

Vardehuus

De Custe Van Noorwegen Fusschen Schaarsondt en Schuytenes Beschreven door Iacob Aertsz. Colom

Duytsche mylen 15 in een graadt — Lieues d'Allemaigne 15 en un degre

Spaensche mylen 17 1/2 in een graadt — Lieues d'Espaigne 17 1/2 en un degre

WEGEN

Der Neus

Vlie Stroom

Oude Stroom

Bussche Eylanden

Schouwen

Texel

Vlieland

Terschelling

Ameland

Schelling

Engelsche Hoeck

Vlieter

Hollandia

Frieslandt

VIII

BRITISH
11 JUG 62
MUSEUM

Wolf-sound. On the east side of Reperwyck lyeth Wolf-sound, before it lye two great Ilands which shew them selves in high gray Rocks, with three or foure Warders upon them, whereby you may know them.

Wolfsound is a narrow haven for to sayl into, there stand two maste upon the westland, where you must goe in close by, leaving them on the larboard side, and some little rockes on the starboard side, untill that you come within the greate Iland, whereupon the great Warders stand, there you may anckor, and lye landlockt for all windes. From thence you may runne foorth through within the rocks and come out againe into the sea, by the old Hill-sound, or you may runne out also at the Eastergatte of Wolf-sound, there standeth a greate Warder on the west side of the gaten, upon a round high rock, there you may sayle out or in by it where you will.

Old Hill-sound. To the eastwards of Wolf-sound lyeth olde Hill-sound but betwixt them both, at the poynt of the west side of old Hill-sound lyeth the Iland of Blind-sound, to the eastwards of it lye manie greate rockes, with two or three Warders upon them.

For to sayle into the old Hilsound, you must runne along to the eastwards of Blind-sound with the rocks that lye by it, in by the west land, leaving them on the larboard side, & the foresayde greate rockes or Holmes with the Warders altogether on the starboard side, there are divers faire sounds, where men may sayle into and anckor in, without taking hurt. You may edge up to the westwards about the point, and sayle through betwixt the Ilands, that you can not see the sea.

Hamer sound. To the eastwards of old Hilsound lyeth Hamer sound, lying in northnortheast. On the west side of the havens mouth lyeth a suncken rock which you must avoyd, and saile close alongst by the Iland, which lieth on the east side of the havens mouth, and anckor behinde the Iland right against the Warder, in thirtie fathom. The easter-gatte lyeth to the eastwards of that Iland, in and out northwest, and southeast: upon the west side lyeth a rock with a Warder.

Kerck-sound. To the eastwards of Hamer-sound, men doe goe into Kerck-sound, and then a halfe league more to the eastwards lyeth the haven of Hesnes. Upon the Iland of Hesnesse stand two Warders, thwart of them it is verie steepe, but towards the little church it is showlder, to wete, about thirtie fathome: the out-rockes thereabouts are all redde of colour.

Hesnesse.

On the west side of the havens mouth lyeth a suncken rock under water, called the Koenagle, upon the land stand two litle mastes, when they come one in the other, then you are thwart of the Koenagell. The two foresayd little mastes, stand upon a graye Holme, leave that on the starboard side, and go so still inwardes, there it is high land, and the Drommels lye from thence northnorthwest within the land, there you may saile through within the rocks, untill you come into Maerdow.

Maerdow. The Iland Maerdow standeth (upon the top of it) ful of trees, and round about it are all bare rockes. On each side of the Iland goeth in a channell. The westergatte or channell goeth in to the westwardes of the Iland, and the easter gatte to the eastwardes of it. For to sayle into the wester gatte, you must leave the Mewholmes (that are a sow rocks and Ilands to the westwardes of the Iland of Maerdowe) on the larboard side, and the Iland on the starboarde side, and run in so betwixt them both northwest and by north, but with a southwest wind, you must sayle in northwest. Upon the northermost Miewholme standerh a Warder.

Thwart of the west end of the Iland Maerdow lyeth a suncken rock under water, whereof you must take heed, when you saile in thus to the eastwards of the Miewholmes. When you are come within the foresayd west poynt or the Iland Maerdow, you may runne up towards the northeast behind it, and ankor in 12 or thirteen fathom, or saile up towardes the north-northwest into the Sound, and anckor there on the west side in 16, 14, or 12, fathom, according as you sayle farre in. In the going into the sound, or haven, it is 34 fathom deep.

For to sail into Maerdow, through within the Mewholmes.

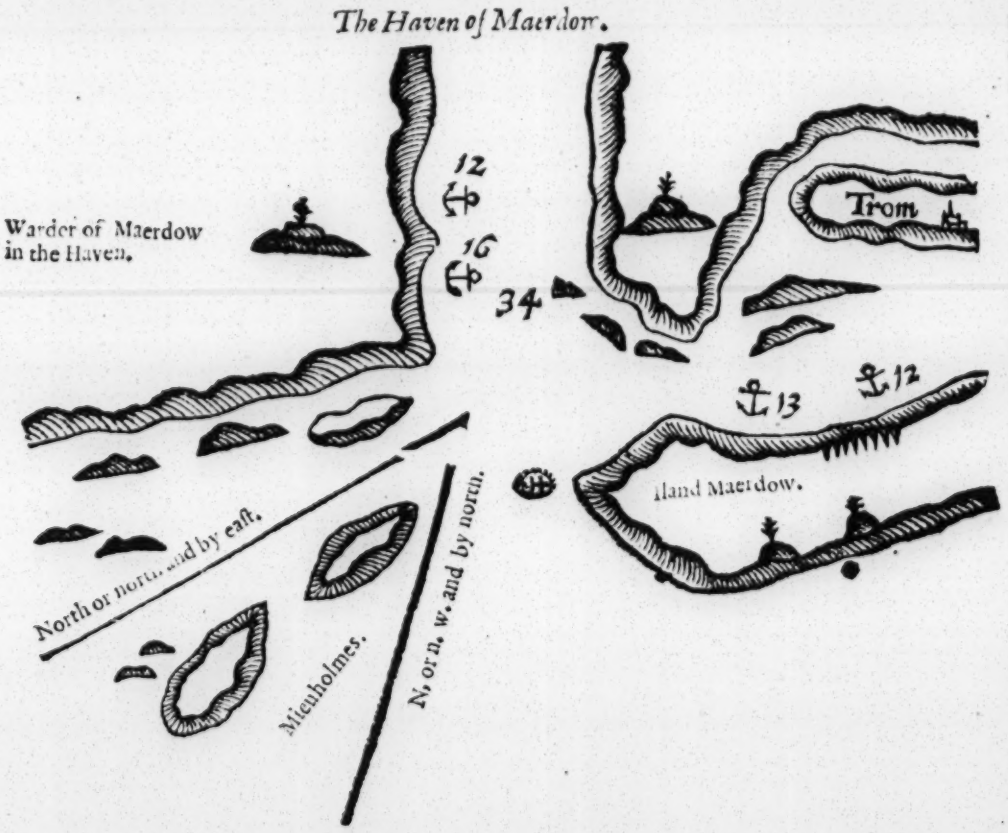
With a bare winde, or otherwise, you may sayle also into this wester-gat of Maerdow to the westwards of Miewholmes, thus: To the westwards of the southermost Miewholme, not farre from it, lye two little rockes, even above water, and a litle further off from in two other rockes which are somwhat greater, you must runne in amidst the channell through betwixt them, leaving the two smallest lying on the starboard side, and the two greatest on the larboard side, that channell lyeth through most north and north and by east. Being come to the end of the Miewholmes, you may sayle up either towards the northeast behinde the Iland Maerdow, or westwards into the haven, as is beforesayd. There goeth somtimes a good tyde out of this haven, & the westerly windes doe blow commonly out of this channell betwixt the high lands therefore he that will come in here with a westerly winde, must be very carefull, and keep up his top sailes, or els he should lightly not be able to get the haven, but drive out of it against his will.

The easter gat of Maerdow

The eastergat lyeth in westsouthwest there lyeth a suncken rock on the starboard side, when you sayle in, therefore you must run in close by the Iland. It is not deeper there in the gat or channell then three fathom, but being come within it, you shall finde it deeper, you may anckor there under the Iland in twelve or thirteene fathom, or you may run up to the westwards into the Sound, as is beforesayd. To anckor under the Iland there is the showldest water, but with a northwest or northnorthwest winde, it is not so good to come from thence as out of the haven, but with an easterly winde it is better to set sail from thence and to get into sea. When the Drommels are northwest and northwest and by north from you, then you are right thwart of Maerdow. If you run in so out of the sea, right with the Drommels, you shall fall right with Maerdow, that is a certain mark to know whether you be thwart of Maerdow, or to the eastwards or the westwards of it, but when you are close before the land, or before the havens mouth, you can not see the Drommels, because they are then hidden of the cliffeland.

Marks of Maerdow.

The Haven of Maerdow.



About halfe league to the eastwards of Maerdow standeth a little white Church upon the sea side, to the eastwards of it goeth in the Trom-sound, being a faire Sound. Without in the comming in, stand on the east or north-side two Warders upon a high hill, you must sayle in by them, and thwart of them you may also anckor, and from thence you may saile in furter behind the Iland Trom, and the land of Maerdow, untill you come into the Sound of Maerdow.

Trom-sound.

About a league to the eastwards of Trom-sound lyeth the haven of Oxeford, which is a great broad, and large Sound, lying in firſt vvithout betvvixt the rocks, north. Without in the comming in to the vveſtvvards of the havens mouth, lyeth a long rock, vvhich you must leave on the larboard side, and

Oxeford.

somevvhat past that long rock lyeth a suncken rock vvhich you must leave on the starboard side and run in still north unto the vveſt poynt of the land, thvvart vvhere of lyeth a suncken rock vvhich you must avoyd, vvhen that you come then vvithin the vveſt poynt, you must sayle in northvveſt and by north, and anckor on the north side of the haven, there it is vvide and broad, vvith may bigths, vvhere you may anckor every vvhere in 20 and 25 fathom.

A league to the eastvvards of Oxeford lyeth Longen before it lieth a little round Iland or rock on the east side of the haven, upon vvhich standeth a mast vvith a barrell upon a Warder. For to sayle in there, you must run in close by that land vvhere

Longen.

the Warder with the barrel ſtandeth upon, cloſe alongſt by the Warder, but there ſtandeth a hand on the ſtarboard ſide of the havens mouth, which poynteth that there lyeth thwart of it a ſuncken rock under water, there you muſt edge ſomewhat off from the ſhore. Being within there, you may run to the eaſtwards againe into ſea, and come out in the Sound of Sandvoordt.

When you are before Oxefordt and Longhen then the Drommels lie about weſtnorthweſt from you.

A great league to the eaſtwards of Longen lyeth Sandfort. For to ſaile in there you muſt leave all the little rock on the ſtarboard ſide, and run ſo alongſt by the land untill you come within the Long-holms which remain on the larboard ſide, and then right into Bight. This is a faire haven men come into it from the eaſtwards. Thwart of Sandvort lyeth a banck at ſea, which at ſome places is not deeper then 3 or 4 fathom, and lyeth alongſt to the eaſtwards untill thwart of Weſtkiell.

Markes of Oxefoort & Longen Santvoort.

Weſtkiel.

Iofferland. A league to the eaſtwards of Sandvoort lyeth the haven of Weſtkiell, a little to the eaſtwards of it lyeth Jofferland. For to ſaile into Weſtkiel, you muſt leave all the great rocks (which lie of from Jofferland on the ſtarboard ſide,) and all the foreſayd little rocks of Sandvoort, and alſo a white holme whereupon a maſt ſtandeth on the larboard ſide, & run in firſt northweſt and afterwards northnorthweſt and at laſt north, untill you come about the weſtpoynt, and then you muſt edge up northweſt to the northſide of the Ilands which lv within the haven, there is a Voſſe, or an Overfall of water, there you may anckor in 20 or 25 fathom.

When you come before Weſtkiel, you may ſee within the land three high hills, and alſo the high land of Longſound, lying northwards from you, that land is altogether very good to be knowne, he that ſeeth it once, and taken regard of it, ſhall know it very wel another time, when he commeth thereabouts.

The Baers. From the northermoſt rocks of Joffer-land unto the Baers, that is the ſouthermoſt or weſtermoſt point of Longſound, the courſe is northnortheaſt a great league. Betwixt them both lye two havens. Eaſtkiel and Abbefoord, men ſayl in there to the eaſtwards of the out-rocks of Iofferland. From theſe foreſayd northermoſt out-rocks of Iofferland unto Eaſtkiell, it is northweſt about a league, but to Abbefoort northnorthweſt and north and by weſt alſo a league. Men may (comming from the ſouthwards, or from Weſtkiell) ſayle through within Iofferland, into Eaſtkiell, or Abbefoort.

For to ſayle through within Iofferland from Weſtkiell, the Sound lyeth through the channell firſt northeaſt and northeaſt and by north, and then eaſtnortheaſt, and afterwards againe northeaſt, and then you come to a place where the ſound is ſomewhat broader, there lyeth a ſuncken rock, which you muſt leave on the ſtarboard ſide, and edge too the north ſhoare. Being paſt that, you ſhall come againe in a very narrow ſound which lyeth through moſt northeaſt, and is at ſome places ſo narrow that the yard armes doe almoſt touch the rockes. Being through that narrow place, you muſt goe northeaſt and by eaſt, and eaſtnortheaſt, untill you come thwart of the Longſound, then you may ſayle in there northnorthweſt, or ſayle into the ſea as you will: Behinde Iofferland you may alſo anckor in 15 or 20 fathom.

Road behinde Iofferland.

A little to the weſtwards of the poynt of the Naze lye two haveus, New and old Silloe, or Silleu; ſome doe call theſe one haven (like as alſo men may doe) and biſtinguiſh it with an eaſter and weſter-gat or Haven, for men can goe with boats through within the rockes from the one into the other, but not with great ſhips.

Silloe. For to ſayle into the eaſter-gat, or New Siloe you muſt take heede of the Biſhops Boeden, which are a few out-rocks a litle to weſtwards of the poynt of the Naze, right before the middeſt of the ſound, leave them on the larboard ſide, and ſayle in alongſt by the land of the Naze untill you come ſomewhat within the foreſayd Biſhops Boeden, and then you ſhall finde there alſo a ſuncken rock, which you muſt avoyd, run about to the northwards of it & edge then up to the weſtwards behinde the Iland of New Silloe, and anckor there againſt the vvhite Church vvithin the foreſayd rock.

OldSilloe. For to ſayle into the vveſter-gat, or old Silloe, you muſt run about to the vveſtvvards of the out-rocks, and Biſhops-Boeden, and ſayle right with the ſouth end of the land of Leeſt; being come by it, run to the eaſtwards alongſt by it, but take heed of ſome rocks, which lye off from the innermoſt Iland on the ſtarboard ſide, being there within anckor againſt the Iland, where you pleaſe.

The Land of Leeſt.

Hitteroe. From the Naze to the Iland Hitteroe, or Hitteren, the coaſt lyeth alongſt the land of Leeſt weſtnorthweſt 5 leagues. To the ſouthwards or the weſtwards of that Iland men doe ſayle into the haven of Windfoord, which lyeth in northeaſt, but to the northwards of it men doe run into Berg-ſound, eaſtnortheaſt in betwixt the Iland and the land. Windfort.

In that Iland is alſo a good haven, which you muſt ſayle into from the northwards, the havens mouth is not very wide when you are come in within it, you may edge up to the eaſtwards or ſouthwards, and anckor. Berg-ſound.

Two leagues to the northwardes of Hitteroe lyeth a haven called Soggendall, there lyeth a little Iland before it, within men may anckor, it is a good road for them which are bound to the ſouthwards. Betwixt them both, not farre without the land lye two out-rocks alongſt the ſhore, called Fockſtones, the one lyeth a little more to the ſeawards then the other. Soggēdall

A league to the northwards of Soggen-dall lyeth Ekeſound, before it lyeth an Iland, which you may ſayle into on both ſides of it, the ſouthergat lyeth in northeaſt; being come in there you muſt anckor on the north ſide of the haven in a bay, there is the beſt road in 8 or nine fathom, the norther gat lyeth in to the eaſtwards, being come in there, you may anckor at divers places. A league to the northwards of Ekeſound lyeth a haven called Sierowach. For to ſaile in there, comming from the northwards; you muſt run in right with the ſouthermoſt ſandbay untill you come cloſe by the ſhore, and then the haven doth open it ſelfe, loof up cloſe alongſt by the north ſhore, then run up by it to the ſouthwards, and avoyd the weſt point, thwart of it lyeth a ſuncken rock twelve foot under water; being there within, let your anckor fall in 7 or 8 fathom, and bring a cable on the weſt ſhore, then you ſhall lye land-lockt for all windes. This a good haven for thoſe which are bound to the northwards. Ekeſound. Sierowag.

To the northwards of Sierowach lyeth the land the Iedder, which lyeth from Sierowach firſt northweſt and by north two great leagues to point Walbert, or Mids-Iedder, and the north 4 leagues, which is altogether a clean whole coaſt, without any dangers or havens, except at the very north end, from which runneth off a little riffe northweſt into ſea, towards the Veetſtone.

The Veetſtone is a great rock, lying about two leagues without the land, lying northnorthweſt from Mids-Iedder five league, betwixt them both, a great league to the ſouthwards of the Feetſtone, lye ſome low black rockes, called Rut. When as you ſaile from Mids-Iedder on northnorthweſt towards the Veetſtone, then the Veetſtone doth ſhew him ſelfe very round, like a hay-cock, and ſayling ſo, you might lightly fall with the foreſayd rocks of Rut, but being a litle more to ſeawards, the Veetſtone ſheweth it ſelf a little longer on the weſt ſide, then you can not take hurt of the rocks of Rut. Veetſtone. Rut.

About two leagues northnorthweſt from the Veetſtone lyeth an Iland, whereupon ſtandeth a Church called Whitings eye, but northnortheaſt from the Veetſtone 4 leagues, lyeth another Iland before the ſound of Stavanger, called Sibrichſtone. Whitings-eye. Sibrich-ſtone.

If you will ſaile into Stavanger comming from the ſouthwards, then ſayle through betwixt the Veetſtone & the maine land, leaving alſo the foreſayd rocks of Rut, lying on the ſtarboard ſide, but you muſt take very good heed of that little ſtone-riff which lieth off from the northend of the Iedder; ſaile in ſo untill that the Veetſtone doe lye ſouthweſt from you, then goe in northeaſt towards the point of Tongenes, which is a long point and low land on the ſouth ſide of the ſound. Tongenes.

When as you ſayle now from te Veetſtone towards Tongenes, then you ſhall ſee that Iland Sibrichſtone before the ſound, which doth ſhew it ſelf in two parts, leave that on the larboard ſide, and ſayle in by the poynt of Tongenes, but there lyeth a rock off to the northwards from the poynt: ſayle through betwixt the rock and the poynt, about eaſt or eaſtſoutheaſt into Doeſwycke; when you are within the caſtle of Doeſwycke, there you may anckor. But if you will ſayle in further before the town of Stavanger, then leave the Diefholm on the ſtarboard ſide, and ſayle in ſoutheaſt, and ſouthſoutheaſt before the touvvne, and anckor there where you pleaſe. Doeſwyk. Stavanger

But vvhen as you come from the northvvards, and vvill ſayle to Stavanger, then run through betvvixt the Veetſtone and the Whitings eye, & then goe on northeaſt tovvardes Sibrichſtone, and the poynt of Tongenes, and doe further is hath been before thaught.

From the Veetſtone to Schuytenes, the courſe is northnorthvveſt five leagues: but from Schuytenes to Sibrichſtone through betvvixt Whitings-eye, the courſe is eaſt 5 leagues. Schuytenes.

Foure leagues vveſt and vveſt and by north to ſea-vvards from Schuytenes lye the rocks called the Outſeers. Outſeers.

Of

Les Costes Occidentales
Entre Schuytenes et
Stemmeshest
Chez Jacques Colom.

Duytsche Mylen
Spaensche Mylen
Eng: en Fr. Mylen

De Cust
van NOORW
van Bergen tot Ste
Nieulyx Besch

Tot
Amsterdam
bij Jacob Colom

Stemmes hyt
I Cortholm
Suidmers
Leen
Eylandt van Vlieland
t Landt
Root
Holm

Duytsche Mylen 15 in een graedt
Lieues d'Allemaigne 15 en un degré

in een graet Lieues d'Allemaigne 15 en un degr

in een graet Lieues d'Espaigne 17½ en un degre

in een graet Lieues Angl. et Franc. 20 en un degr

ust

RWEGEN.

Stemmesheft.

eschreven.

um

lertsz

Stadt.

Bergen

Het
Liet van
Bergen.

van

Bommel

hooft.

Vlie

Wester

9

BRITISH
MUSEUM

Of the ſtreames on theſe coaſts.

On theſe Coaſtes of Norway off from the Naze, untill paſt Bergen unto Stade, the water riſeth and falleth, but keepeth no certaine tyde: but from thence towards Dronten, and to the northwards of it, it keepeth tyde according to the moone, like as in other places.

How theſe landes doe lye one from the other and from other lands.

From Iland Farder to the Longſound weſtſouthweſt. —— 8 leagues
From Farder to Larwyke weſtſouthweſt. —— 4 leagues
From Monck Iland, or Roge to Farder, ſouthſouthweſt —— 5 leagues
From Baſt to Farder ſouth and by eaſt about —— 5 leagues
From Soen-water to Farder ſouth or ſomewhat more weſterly —— 8 leagues
From Copperwyck to the Baſt ſouth and by eaſt —— 4 leagues
From Red-poynt to the Baſt weſtſouthweſt —— 4 leagues
From Siſters to the Baſt northweſt —— 5 leagues
From Aker-ſound to the Siſters weſt, and by north —— 4 leagues
From Schareſound to the Naze weſtſouthweſt —— 3 leagues
From Fleckory to the Naze weſtſouthweſt —— —— 8 leagues
From Rut to the Veetſtone north and by weſt —— a league and a half
From the Veetſtone to Schuytenes northnorthweſt —— 5 leagues
From Sibrichſtone to Schuytenes through within Whitings eye weſt 5 leagues
From the Naze to Outſeers the courſe is northweſt —— 29 leagues
From the Naze to Hitteroe the courſe is weſtnorthweſt —— 1 leagues
From Hitteroe to Ekeſound the courſe is northweſt —— 4 leagues
From Ekeſound to Sierowach northweſt and by north —— 2 leagues
From Sierowach to Mids-Iedder, northweſt and by north 2 leagues
From Mids-Iedder to Rut the courſe is northnorthweſt —— 4 leagues
From Wolf-ſound to Fleckory or Reperwyke to the Naze W. S. W. 3 leagues
From Blind-ſound to Wolf-ſound ſouthweſt —— 3 leagues
From Maerdow to Blindſound ſouthweſt —— —— 4 leagues
From Maerdow to Wolf-ſound or Reperwyk weſtſouthweſt 8 leagues
From Iofferland to Maerdow ſouthweſt —— 8 leagues
From Eaſtryſen to Maerdow ſouthſouthweſt —— 3 leagues
From Longhſound to the Iofferland ſouthſouthweſt —— one great league
From Iofferland to Fleckory ſouthweſt —— —— 19 leagues
From Wolfſound to Fleckory W.S.W. and ſ.w.by weſt about 2 great leagues
From the Naze to the Holmes in Iutland ſoutheaſt 19 or 20 leagues
From the Naze to Bovenbergen ſoutheaſt and by ſouth 24 leagues
From the Naze to Holyland the courſe is ſouth and by eaſt and ſouthſouth-eaſt —— —— —— 67 or 68 leagues
From the Naze to the Eems, ſouth, ſomewhat eaſterly 75 or 76 leagues
From the Naze to Born-riſſe, ſouth, ſomewhat weſterly —— 83 leagues
From the Naze to the Teſſel or Maerſdeepe, the courſe is ſouth and by weſt diſtant —— —— —— 93 leagues
From the Naze to Walcheren ſouth and by weſt 125 or 126 leagues
From the Naze to the Heads, or the Strait betwixt Calice and Dover, the courſe is ſouthſouthweſt, or ſomewhat more weſterly 143 leagues
From the Naze to the Holmes before Yarmouth ſouthſouthweſt, ſomewhat weſterly —— —— —— 104 leagues
From the Naze to Flambrough head ſouthweſt —— 100 leagues
From the Naze to Scarborough ſouthweſt —— 99 leagues
From the Naze to the river of Newcaſtle ſouthweſt and by weſt ſomewhat weſterly —— —— —— 104 leagues
From the Naze to Liet in Scotland W. S. W. ſomwhat weſterly 103 leagues
From the Naze to Boeckneſſe weſt ſomwhat northerly 88 or 89 leagues
From the Naze to Fayrhil weſtnorthweſt —— 93 leagues
From the Naze to Hitland the courſe is n.w.and by w. about 100 or 101 leag.
From the Kloof or the Cow and Calf to the Scaw the cours is eaſt and by ſouth, ſomewhat eaſterly —— —— 30 leagues
From Fleckory to the Holmes in Iutland ſoutheaſt and by ſouth 19 leagues
From Fleckory to the Scaw eaſt and by ſouth —— 25 or 26 leagues
From Reperwycke to the Scawe eaſt and by ſouth and eaſt S. E. 24 leagues
From Maerdow to the Holmes the courſe is ſouth —— 24 leagues
From Maerdow to the Scaw ſoutheaſt and by eaſt —— 20 or 21 leagues

How theſe Lands doe ſhew themſelves at ſea.

Calfe cow.



Thus ſheweth the Cow and Calfe, being foure or five leagues north and by eaſt from you.

Calfe cow.



Thus ſheweth the Cow and Calfe, when you come from the weſtwards, and are thwart of them.



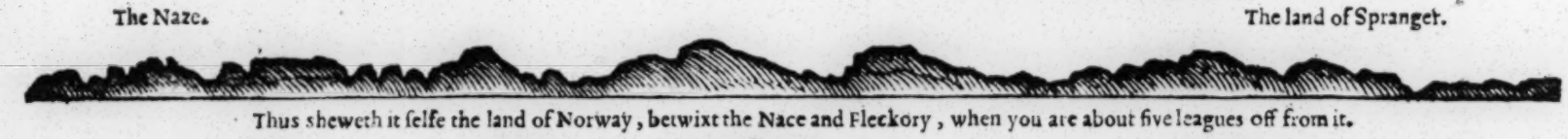
Thus ſheweth the Nace, being four or five league weſt from you.



Thus ſheweth the land to the eaſtwards of Longſound, when you are about five leagues off from the land, and ſaile from the weſtwards alongſt by it.

The Naze.

The land of Sprangel.



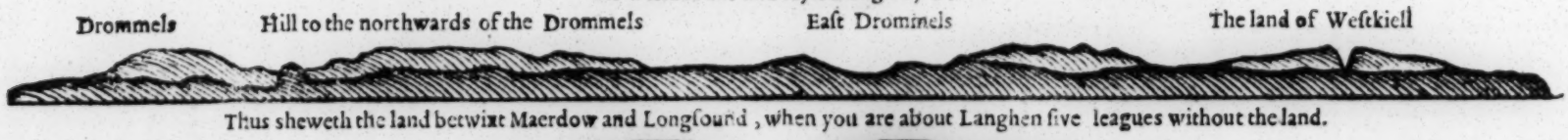
Thus ſheweth it ſelfe the land of Norway, betwixt the Nace and Fleckory, when you are about five leagues off from it.

Fleckory — The Boat — Wolfſound — Hamerſound.



The land betwixt Fleckory and Maerdow, or the Drommels, ſheweth thus, when you come from the weſtwards, and ſayle alongſt by it.

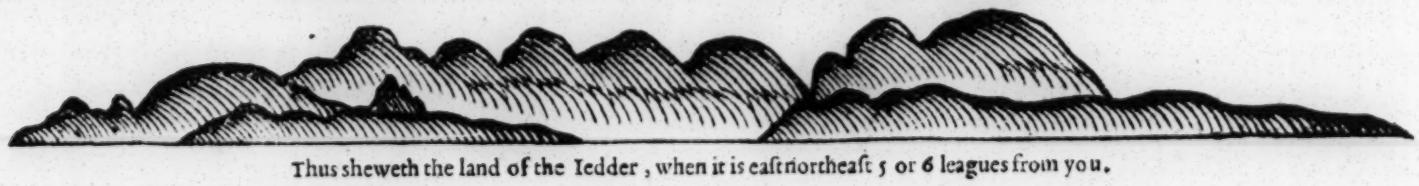
Drommels — Hill to the northwards of the Drommels — Eaſt Drommels — The land of Weſtkiell



Thus ſheweth the land betwixt Maerdow and Longſound, when you are about Langhen five leagues without the land.



Thus ſheweth the land of the Iedder, when it is northeaſt five leagues from you.



Thus ſheweth the land of the Iedder, when it is eaſtnortheaſt 5 or 6 leagues from you.

The ſeventh Demonſtration,

In which the Lieth of Bergen, and the north coaſts of Stemmes. Heſt are deliniated.

BEtwixt Schuyteneſſe and Bock goeth in the Liet of Bergen. Schuyteneſſe is about foure leagues long, at the ſouth end lye ſome ſuncken rockes and fowle grounds; for to avoyd them comming in out of the ſea, you muſt keep the top of Bock a litle without the poynt of Schuyteneſſe, and then you ſhall goe cleare of them; But if you bring Bock cloſe by or to the poynt of Schuyteneſſe, and ſaile ſo right in for to runne about cloſe by the poynt of Schuyteneſſe, you ſhall ſurely ſayle upon thoſe foreſayde ſuncken Rocks and fowle grounds.

The great Warder. From the ſouth-end of Schuyteneſſe, the Liet lyeth in firſt north and north and by weſt two leagues to the great Warder, which is a road ſo called after four great Warders, which ſtand there thwart of it upon the land of Schuytenes, for the knowledge of this road: there lye commonly the ſhips that tarry for a wind, being bound either to the northwards or to the ſouthwards, there it is a very good lying in five, ſix, ſeven or eight fathom, as well for northerly as ſoutherly winds, you may alſo anckor to the northwards of the Warders about a poynt in five, ſix, eight, ten and twelve fathom, there you ſhall lye landlockt for ſoutherly winds.

Copperwyke. A little to the ſouthwardes of the Wardes lyeth a Bay, called the Coperwyke, within it is alſo a good Haven for them which are bound to the eaſtwards, and will ſet ſail with a weſt wind: when a eaſterly or northerly wind, you can not well ſhift roads from thence or come out. At the comming in to this Baye lyes a ſuncken rock, called the Coppernaile, upon it ſtandeth all wayes a great Pole, where by you may ſee to avoit it.

Coppernaile.

Without at the ſouth point of Schuytenes on the eaſt ſide is alſo a little Bay or two, where men may anckor.

A little

Bochaven. A little to the northwardes of Bock, on the eaſt ſide of the Liet is alſo a Bay, called Bockhaven, where men come to anckor.

All theſe roads, as alſo the Copperwyke, are good for thoſe which comming from the ſouthwardes, by reaſon of contrary winds can not get to the great wardes.

A little more ſoutherly then the Coperwyke, on the eaſt ſide of the Liet to the northwardes of the Bock, lyeth in north into the land, a Sound, which ſheweth it ſelf (when you come from the ſouthwardes) much broader then the right fare way, ſo that thoſe that are not there very well acquainted, ſhould not think otherwiſe, but that it was the right channell, and ſo ſhould lightly go up a contrary way. Therefore it is neceſſary and needfull to ſail cloſe alongſt by Schuytenes, and not goe off from the weſt ſhore, untill you come thwart of Kopperwike, then you ſhall be within the point of the foreſaid Sound.

Notou. About a great halfe league by north the great Warder, lieth Notou, there ſtandeth a little white church and ſome houſes, thwart of it in the Bay is alſo good anckoring for northerly winds, and good road for them which are bound to the northwardes. Likewiſe it is good anckoring by north the poynt of Notou, for them which are bound to the ſouthwards. Allmoſt at the north end of Schuyteneſſe, is alſo a road, called Sichſtreame, where is alſo good lying.

Sichſtream. At the north end of Schuyteneſſe lieth a little Iland when you ſaile up or downe the Liet, you can ſee through betwixt them into ſea. At this Iland is alſo a good road under a rocke,

Wibrants-eye. or Iland, called Wybrants-eye, there it is good Anckoring for all windes.

Betwixt that foreſaid Iland and the maine land, you muſt ſaile through a narrow ſtrait, which is but a little more then a ſhippes lengt broad; on the eaſt ſide where of; which is on the ſide of the maine land, there lieth a little rock, or ſuncken rock, therefore you muſt ſaile cloſe by the weſt ſide that is cloſe alongſt by the Iland for to avoid the foreſaide rock.

The Bommel. From Wybrants-eye over the Bommel to the Blockx, the courſe is northnorthweſt, but firſt ſomewhat more weſterly about two leagues, betwixt them both it is on the Weſt ſide a broken land, great and little Ilands and rockes. About halfe wayes betwixt them both goeth a channel into ſea, where men doe ſaile much in and out, and it is cleane, broad, and wide. He that will runne out there (comming from the northwards) may eaſily eſpye it, when he is a halfe league paſt the Blockx. On the weſt ſide lye two little Ilandes or great rockes, which ſhewe much greater then the other rocks, theſe you muſt leave on the larboard ſide, and run out by them ſouthſouthweſt into the ſea.

He that will runne in here out of the ſea, he ſhall (when he commeth to the end of Schuyteneſſe) ſee many little Ilands or rocks, he muſt ſaile paſt all theſe, untill that he get ſight of thoſe foreſayd two great rocks, and then in by them leaving them on the ſtarboard ſide; and ſo he ſhall come ſomwhat to

The Blocx. the ſouthwardes of the Blockx or Longholme into the Liet.

The Blockx are two rockes, lying very neare even with the water, which you muſt leave on the larboard ſide, in ſailing up, and runne cloſe alongſt by the eaſt ſhore, through betwixt the

Longholm Blockx and Longholm. Longholme lyeth a little above the Blocx, within it is a good Haven, where is good lying. A little to the northwards of it lye two rockes more, thwart of them lyeth a ſuncken rock which you muſt avoyd.

From the Blocx alongſt over the Bommel it is yet 2 leagues, firſt north, and then northnortheaſt, all alongſt by the land of Bommelhead, the ſouth end of this land is a high ſteepe poynt, called Bommel-head, to the ſouthwards of it runneth a channel

Bommellſound. weſtſouthweſt into the ſea called Bommel-ſound. This channell is good for to know, comming in out of the ſea. The land of Bommel-head is about 4 leagues long, and the firſt long Iland to the northwardes of Schuyteneſſe, it is altogether low plaine land except on the ſouth end, which is ſo ſteep a point, as it if were hewen right off with and Axe. About the middeſt between both ends of this Iland (on the ſea ſide) lyeth a very

Sick. high round hill, called Sick, of faſhion almoſt licke a ſugerloafe or a mans hat, and lyeth farre above all that low land, which you may eaſily ſee at both the ends of this Iland, and alſo further, where by it is very good to be knowne.

Bommellhead. For to ſaile into this foreſaid channell out of the ſea, you muſt bring that ſteepe point of Bommell-head eaſtnortheaſt, or ſomewhat more northerly from you, and ſaile then towards it. And then you ſhall leave a great many little Ilands and rocks on the ſtarboard ſide, and the foreſaide point on the larboard ſide, and cloſe in about by it to the northwardes.

A little about this point of Bommel-head, on the Innerſide, lieth a Haven, called Bommelhaven, there lieth a rock before the mouth of it, and alſo a ſuncken rocke betwixt that rock and the north point of that Haven: He that will go in there, muſt go into the ſouthwards of the rock, in betwixt the ſouth point and the foreſaid rock, leaving the rock one the ſtarboard ſide of him. So ſoone as men are within the Haven, they muſt let fall their anckor, within it is broade and wide, and men lye there landlockt for all winds.

Munſterhaven. At the end of the Bommell lyeth Munſterhaven in the land of Bommell-head, on the weſt ſide of the Liet, even about the point. This is alſo a good haven for them which are bound to the ſouthwardes, and by reaſon off contrary windes can not get further, there ſtandeth a little white church thwart of it men muſt anckor in ten or twelve fathom.

Beulshavē From Munſterhaven to Beulhaven it is north an Engliſh mile, there is alſo good anckoring for ſoutherly windes, further it is north, ſomewhat eaſterly to Volger-roade, before it lieth a

Volgherroad. little Iland, under it, or by it on the one ſide or other men may anckor for all winds Men may alſo ſaile round about it, and run in and out at both ſides of it, if they will.

Bremer Diefholm. From Munſter-haven to Bremer-holme the Liet lieth north, ſomewhat eaſterly about two leagues, there the Liet is devided into two parts, to wete, into the Old and the New Liet: The old Liet goeth through to the eaſtwards of Bremer-holme and the Iland that lieth to the northwards of it, but the new land alongſt to the weſtwards of it.

Old Liet. The Olde Liet is not wel to be uſed by them, which are not there very well acquainted, alſo great ſhips that draw twelve or thirteen foot, may not goe through there.

Somewhat more then thwart of the middeſt of Bremerholme, in the narrow of the Old Liet, lieth a ſhowld whereupon is no more then thirteene or fourteene foot water. A litle to the northwardes of it on the eaſt ſhoare lieth a bay called Ingeſound, where is good anckoring: there lieth alſo a bay on the weſt ſide, halfe wayes betwixt that foreſaid ſhowld and Bremer holm, where men alſo may anckor.

New Liet. The new Liet is broad and deepe enough. Thwart of Bremer-holme, in the fareway, neareſt the weſt ſide, lieth a ſunken rock, where of you muſt take heed. For to avoyd it, you muſt marke the Iland before Folger road. If you keep it ſo that you may ſee it without the north-point of Folger-roade, then you can not come to neare that ſuncken rock: but if you bring that Iland behind the foreſaid point, ſo that you can not ſee it, you ſhall without faile ſaile right upon it; you muſt obſerve theſe marks as well in ſailing up as in ſailing off.

Ruigheholme. In the middeſt of the New Liet lieth Ruige-holme, there men lye with ſhippes faſt unto two Riggs: the one is upon the Iland, and the other upon the point to the northwards of it, where they bring out Cables to.

Redholm. From the New Liet to the point of Rootholme, it is northnortheaſt a halfe league, betwixt them both goeth out the Soltmerfioerd weſtſouthweſt into ſea, which is a faire broad and large channell. On the ſouth ſide lye ſome ſuncken rockes, but if you run out amid the channell, you can take no hurt of them.

Soltmerfioerd. At ſea men doe knowne this Soltmerfioerd by that foreſaid high and round hill Sicke, which is very good to be knowne, and lyeth two leagues to the ſouthwards of it, about halfwayes betwixt this Sound and Bommel-ſound. The land on the ſouth ſide of Soltmerfioerd towards Sick, are ſmall white rockes, which you muſt leave on the ſtarboard ſide, and runne in ſo amid the channell eaſtnortheaſt, and then you can take no hurt of thoſe foreſaid ſuncken rockes, lying on the ſouth ſide of this channell. There lyeth alſo a ſuncken rocke at ſea before this Sound on the ſouth ſide a little off from the north point of the land of Bommell-head, with hard winds out of the ſea, the ſea breaketh very much upon it, but it lyeth at leaſt 5 or 6 fathom under water.

When as you come in here, you have Redholm on the larboard ſide, and you muſt run northeaſt alongſt by it, untill you come about the foreſayd poynt.

From the poynt of Redholme to the Narrow it is north, and through the Narrow northnorthweſt and north & by weſt at leaſt a halfe league. In this ſtrait it is ſo narrow, that you can but even turne through it on the weſt ſide of the ſtrayt lieth a little Iland, thwart of it is good anckor-ground in 13, and 14 fathom.

From the ſtraite to the Reine Knape, the courſe is northweſt, and by north two leagues: this is a little Iland without trees, cleane round about, which you may ſayle about on both ſides.

Reine Knaep. Thwart of Reine Knaep on the eaſt ſhoare lyeth Deepe-ſound a good haven for them which are bound to the ſouthward, the mouth of it is narrow, and alſo but three fathome deepe, but within it is broad and large, and twenty fathome deepe

deepe. Alongſt to the weſtwards of the Rem Knaep, it is broadeſt, to the eaſtwards lyeth a point, and by it a little Iland you may ſayle through betwixt the point and the little Iland. From the Raine Knaep to Bag-holme, the courſe is north and by eaſt a great league: Betwixt them both by ſome Ilands and rocks, all which you muſt leave lying on the ſtarboard ſide, there you may at divers places ſaile through and within theſe Ilands and rocks, and at laſt come out againe by Bagholme into the Liet, but it is not to be done but for them that are there extraordinary well acquainted. Men might lightly get in amongſt theſe Ilands and rockes, ſo that they ſhould not know how to come out againe. At the eaſt ſide of Bag-holm men may anckor, but there ſhooteth off a little ledge of rocks from the north end, whereof they muſt take good heed.

Crabkerk. From Bag-holme to Crab-kerke it is north about three quarters of a league, this is an indifferent haven for ſoutherly winds, but it is little, there can lye no more then two or three ſhippes.

From Crabbe-kercke to Bock up Ra, it is north, ſomewhat eaſterly a league, betwixt them both runneth out the Croſſe-ſound, or Cruyſvoert weſtſouthweſt, and ſouthweſt and by weſt into ſea, which ſound is very good to be knowne at ſea, (by three hills) almoſt like the Drommels on the eaſt ſide of Norway, but not to high) which lye thereabouts within the land, which are alſo called by ſome the north Drommels, when they are northeaſt, or thereabouts from you, then you are open before the Croſſe-ſound. Before the mouth of it lieth a little Iland neareſt the ſouth ſide, from which lye off ſome rockes to ſeawards, the broadeſt and largeſt channell is alongſt to the northwards of it you may wel alſo ſail through to the eaſtwards of the Iland betwixt it and the land, but there it is narrow, yet cleane and cleare without any dangers. When you are within it you muſt goe in alongſt eaſtnortheaſt and northeaſt and by eaſt, and ſo ſhall come into the Liet againſt Cruyſenes, a little to the ſouthwards of Bock up Ra.

North Drommels.

Bock up Ra. Bock up Ra is a little Iland which you may ſaile about on both ſides, alongſt to the weſtwards of it is the common fare-way, and alſo deepeſt. When as you ſaile about to the eaſtwards of it, and come to the north end of Bock, there it is very narrow, and there right in the fare-way (ſomwhat nearer the eaſt ſhoare then Bock) lyeth a ſuncken rock, there ſtandeth alwayes a pole upon it, for to avoyd it, you muſt leave it on the ſtarboard ſide, and run alongſt to the weſtwards of it. Betwixt this Rock and Bock, it is no deeper then ſixteen foot. Right to the weſtwards thwart of Bock lieth an other Iland, under it you may alſo anckor in Bock-liet. To the weſtwards of this Iland goeth through the Cobbeliet, which men doe ſaile through with bare winds, or when they muſt turn through, becauſe it is broader then on either ſide of Bock up Ra.

Cobbeliet

Watting-ſtream. From Bock to the Watting-ſtream it is north a league, there you can not ſaile amiſſe. If you doe not ſaile againſt the land, for there lye no dangers, except at the weſt ſhore lieth a ſuncken rock cloſe by the land, whereupon remaineth at low water about 10 foot water. Upon the end of Watting ſtream, the courſe is northweſt about a ſhot of a caſt peece, or a quarter of a league, and then you come thwart of little Alefioerd, which is a haven on the weſt ſhore, where is good anckoring both for a north and ſouth wind, under a high round Iland, where you ſhal lye land-lockt. From thence to the Reeſtone it is north about two leagues, betwixt them both on the weſt ſhore lieth great Alefioerd, which is alſo a haven both for northerly and ſoutherly winds, thwart of it the fareway is about two muſket ſhot broad The Reeſtone is a rocke under water, lying by the point, where the two high hills ſtandeth, which men doe cal the Lethoorns, theſe are two high ſharp hilles, which men may ſee farre off, as they ſaile up or off that Liet. Upon the Reeſtone ſtandeth allwayes a Pole, that thereby men may avoid it. You may alſo ſail alongſt to the eaſtwards of it, but to the weſtwardes of it is broadeſt, and the right fare-way, over againſt it on the weſt ſhoare lieth Knorwyck, a haven where men may alſo anckor.

Lit-le-Alefioerd.

Reeſtone.

Great Alefioerd.

Lethorns.

Knorwike.

From the Reeſtone to Werckeneſſe, the courſe is eaſt northeaſt about a quarter of a league, and then you leave the Iland Aſland lying on the larboard ſide to the northwards of you, it lye alſo two havens where you may alſo goe to anckor, the one called Struys haven, and the other Schoon-haven. To the weſtwards of Aſland you may ſaile to Jeltefioerd, and run out there about northweſt into the ſea.

Werckeneſſe.

Struys-haven.

Schoon-haven.

Jeltefioerd

When you come out of the ſea into Jeltefioerd, then you come into the weſtwards of Aſland againſt the Ree-ſtone into the Liet.

At the ſouth point of Aſland lieth Ielteſchaer, a little round Iland or rock, whereupon ſtandeth a great Iron ring when as men com up the Liet & with calmes are in danger to be driven with the current to the northwards along by Aſland, then they bring with the boat a cable faſt on it, men may wend round about the foreſaid rock without any danger.

Horneſſe. From Werckeneſſe to Horneſſe, it is eaſt a little diſtance: when you come by it, you may ſee the tovvne of Bergen lye before you, you muſt anckor before it in the Wage, in 11, 12 or 13 fathom.

Harle. To the northvvards of Aſland lieth the Iland Harle, vvhich is about 5 leagues long; vvhen you come from the northwards, you may run about it on both ſides, and ſo come into the Wage of Bergen. The Harlefioerd goeth out about north and by weſt, and northnorthweſt betwixt Aſland and the land of Harle

From Ieltefioerd, or the Wage of Bergen, to Olde, the coaſt lieth northnorthvveſt, and north and by weſt about 16 leagues, that is al broken land, vvith many rocks, vvhere men may ſaile through within them. The Norvvay Barkes come off from Stade all alongſt through that broken land and rocks, and within the Iland Harle unto Bergen.

About foure leagues and a halfe to the ſouthvvard of Old, lieth a great rovv of rocks, lying 3 or 4 leagues vvithout the other rocks, thvvart of from the ſhoare to ſeavvards, called the Outweers. Outweers.

Betwixt them and Old lieth a good Haven, called Southfoort, there lye 3 Ilands before it, vvhere men run in betvvixt them both alongſt into the Haven.

Olde. Olde is a high rock, a good vvayes from the land, and looſe from the other rocks by the land, but hath ſome ſmall rocks lying about it, there lieth alſo a rovv of rocks, a good vvayes off from it ſouthvveſt into the ſea.

About northvveſt and northvveſt and by north from Olde lye 2 rovves of rocks, vvhere of ſome lye above and ſome under vvater. When as you are either to the northvvards or to the ſouthvvardes of Old, it doth ſhevv it ſelfe vvith a great ſaddle, in 2 hommockes, and going dovvne round on both ſides, but being thvvart off, or vveſtvvards from it, then it lieth in one round hil, almoſt like Coll You may (comming from the ſouthwards) runne in about the eaſtwards within Old, northeaſt to Oldeſound, and come out againe to the northwardes of Olde.

Kyn. Foure leagues to the northwardes of Olde-ſound lyeth Kyn, alſo a great rocke, which men may ſaile roundabout, & ſheweth it ſelfe with two ſharp Hommocks, almoſt like a Cowes clawe, or Biſhops Myter.

Waldres Eaſterdal. Betwixt Kyn and Olde goeth a great Sound into the land, upon which lye two towns, Waldres and Eaſterdal Northweſt and by weſt from Kyn lye 3 or 4 rocks, and alſo ſome ſuncken rocks under water. Southweſt and by weſt about 3 leagues off from it, lye alſo ſome rockes above, and ſome under water.

Ornael. Three or foure leagues to the northwards of Kyn lyeth Ornael, alſo a great rock, which ſheweth it ſelf in one great high round Hill. Three leagues, or three leagues and a halfe to the northwards of it, lyeth the ſouth poynt of Stade. But Ornaell and Olde lye about north and ſouth 7 or 8 leagues aſunder.

Stade.

North-poynt off Staden. Betwixt Ornael and the ſouth point of Stade goeth in a great broad ſound, from whence men may ſaile through within the broken land to the ſouthwards to Bergen. A little within the ſouth point of Stade is a Bay, where men may goe to anckor, thwart of a ſea-beacon, and lye ſheltred for a weſt winde. The land of Stade lyeth from the ſouthpoint to the northpoint northnortheaſt, and ſouthſouthweſt which is a whole main coaſt but full cloſe alongſt by the ſhore, with many ſmall rocks; but none that men may ſayle about with in them for to have any ſhelter for the ſea. The Norway Barkes of all places to the northwards of it, yea and all thoſe which come off from the North Cape, can ſayle all alongſt the coaſt of Norway unto Berghen, through within the rocks, except thwart of this land of Stade, there they muſt run ſea-board through the ſea.

Havens on Stade.

Between theſe two foreſayd points are alſo two litle havens, where men may ride, but a little or nothing uſed.

Swynoe. To the northwards of Stade the land lieth with many Ilands northeaſt to the broadſound eight leagues. About halfe wayes lyeth a little Iland or rock, called Swynoe (that is Hogges-Iland) a league from land without the other Ilands of Flowach. When you are cloſe by the north point of Stade, and go on northeaſt you run through within that little Iland Swynoe, but with a northeaſt and by north courſe about a ſeaboard of it.

Broad-ſound. He that is bound to Roemſdall, or into the Sounds of Sudmer, muſt runne into the Broad-ſound, which goeth in at the ends of the Ilands of Flowach eaſt and eaſt by ſouth, the outermoſt of theſe Ilands is called Haſſeu. When you come to the end of thoſe foreſayd Ilands, you ſhall ſee eaſt from you about two leagues, a great high ſhort Iland, called Goedeu, or ſome Godſche-ſand, and a little to the ſouthwards of it, ſomewhat further in a great black rocke, of faſhion like a hay-cock, or allmoſt like a ſugerloafe, it is called

Goedeu.

by the saylers the Cookes-broad: sayle in rigt with it, but bring not that foresayd rock to or under that Iland, but keep it clear off without it: for els you should surely sayle upon the foresayd suncken rockes, which lye under water at the north side of the broad sound.

From the Iland Goedeu or Godsche-sand runneth of also a little riffe, to the southwards, or towards the southeast from it. When you come by that Iland ruune about by that little riffe, in betwixt it and foresayd black rock, and ankor a little within that riffe, under Goedeu, runne not farre within it, for to avoyd a suncken rock, which lyeth somewhat further in, not farre from land, there stand two little warders upon the shoare, a litle within the riffe, for know ledge of the roade.

Geske. Behinde, or to the northwards of Godeu lieth the litle Iland Geske: upon it standeth a litle Church on the south side, before it men may also ankor in eight or tenne fathom cleane ground.

Walderoe. A little within Goedeu, on the east side of Geske lieth another Iland, greater then Geske, called Walderoe, on both sides of the southeast poynt of that Iland men may anckor in good cleane ground, and lye land lockt for all windes.

From thwart of Geske and Walderoe lyeth a great multitude of Rocks northwest so farre into sea, that comming a seal oard alongst by Swynoe with a northeast course, you should farre within them.

He that comming from the northwards may saile by west alongst by these rocks to Godeu, & leave the aforesaid suncken rocks (lying on the north side of the Broade sound) on the starboard side of him, and runne in about by the point of Goedeu, as hath been before sayd.

You may also run in to the northwards of Goedeu, to wit, in betwixt Goedeu and Geske, and ankor within Geske, or under Walderoe, but it is not well to be done, but for to them which are there verie well acquainted.

There lye manie Rocks, some above, and some under water, whereof men must take heede. In at the Broade sounde is the best and surest.

For to runne from Walderoe to Roemsdale, goe on to the northwards, alongst by the great Ilands Luycko, it is in that sarewaye, ten, twentie, sortie, sixtie, and eightie fathom deepe, but even past Luycko runneth a stone riffe thwart over the sarewaye, on against the poynt of the maine land, you must thereabouts edge off from the Iland on the larboard side, and runne indifferent close alongst by that poynte of the mayne land on the starboard side, and then you runne over the deepest of that Stoneriffe, to wete, in three fathome or thereabouts, as soone as you shall be over it, it is againe verie deepe, of tenne, twentie, and presently an hundred and two hundred fathom. Runne on still by the land on the starboard side, and verie close alongst by it, and leave all the Ilands lye on the larboard side, and so you shall come unto the River of Roemsdale.

Towards the southeast from the foresayd Iland Goedeu or Godsche-sand goeth a great deepe river into the land, to Sickule, Honighpale, and other lading places more.

Luco, Luyck-sound. To the northwards or northeastwards from Geske, lye (amongst a great manie other rocks and little Ilands) five greate Ilands, the first called Luco, which is a high Iland, like as also the second, betwixt the two goeth in a channel about southeast called Luycksound.

Harmsoe. Upon the third called Harmsoe lyeth also a high hill, but is a both endes somewhat lowe.

Lemsoe. The fourth and smallest called Lemsoe or the lowe Iland sheweth it selfe in two or three low hommocks.

Flemseu. The fifth called Flemseu, or the Iland, is a great and lowe Iland, but seemeth little to see at sea, because there lye but one hommock upon it (not verie greate) and of fashion as the roof or cabben of a Hoye, or the west end highest, within the east poynt of that Iland is a good roade in a bight, where men lie landlockt for all winds.

Koose Iland. To the northwards or eastwards of Flemseu or the Roose Iland, goeth in a channell called Nogwe Fioert, lying in east and by south, at which men may runne in to Roemsdale.

Without these foresaid Iland off from Luco unto Boede lieth a great multitude of outrocks, great and small, called the Roemsdales shares. Roemsdales Schares

Eastwardes from the Roose Iland, or Flemseu, lieth (amongst other rocks and little Ilands) the Iland Lever, which men may sayle about on both sides, either wether they be bound outwards from Roemsdale to Beresound or Boe, or inwards from Boe or Beresound, and will runne through the foresaid Ilands. Lever. Beresound

Beresound is a Haven within some rockes even to the southwards to westwards of the point Boe, there it is good lying, but not good to come into without a Pilot, or some one that is there well acquainted. Boe.

Boede is an out-point, with a neck or small point of land, fast to the maine land, alongst to the southwards of it men may run in and up, to the southwards to Beresound, or els goe to ankor in a bay on the north side behinde Boe, by some houses, where they may lye sheltred for a westwinde.

From Boe to Stemmeshed, the coast lieth about northeast 2 leagues, betwixt them both about half wayes, lye many small lowe black Out-rocks, as if they were sowne alongst the shoare, called the Stoppels, betwixt them and the maine land you can not sayle through with great shippes without great danger. Stoppels. The Norwaye Barckes runne alongst with in them, and also anckor there within, under a rock, which is somwhat greater then the rest, and lyeth about the middst of the Stoppels (or somewhat nearer the main land) called the Eartholm.

All the Ilands betwixt Broad-sound or Flowach and Boe, belong under Roemsdale.

How these lands doe lye one from the other, and from other lands.

From Schuytenes the Bommels-head N. N. W. somewhat northerly	7 leagues
From Bommels-head to Cruysoort northnorthwest	9 leagues
From Cruysoort to Harle northnorthwest	13 leagues
From Schuytenes to the Outseers west, and west and by north	4 leagues
From the Outseers to Ielteseoerd, or the Wage of Berghen north and by west	26 leagues
From Schuytenes to the Flye south and by east southerly	106 leagues
From Schuytenes to the Tessell, south and south and by east	112 leagues
From Schuytenes to Walcheren south	122 or 123 leagues
From Schuytenes to the Holms before Yarmouth south and by west, or somewhat more westerly	113 or 114 leagues
From Schuytenes to Flambrough head s. w. and by south	104 or 105 leagues
From Schuytenes to Tinmouth, the course is southwest,	104 leagues
From Schuytenes to Boeckenes west and by south southerly,	72 leagues
From the Outseers to the Flye south and by east,	103 or 104 leagues
From these Outseers to the rocks Outweers north and by west	40 leagues
From Ielteseoerd or the VVage of Bergen to Hitland, west	48 leagues
From Ielteseoerd, or the VVaghe of Bergen, to the North-end of Hitland west and west and by north	50 leagues
From Schuytenes to Hitland w. and by north, and westnorthwest	66 leagues
From Schuytenes to the northend of Hitland westnorthwest somwhat northerly	71 or 72 leagues
From Ielteseoerd or the Waghe of Berghen to the Rocks of Outweers, northnorthwest, and north and by west about	11 or 12 leagues
From the Outweers rocks to Old, nortnorthwest and north and by west betwixt	4 and 5 leagues
From Olde to Cyne north and by east, and northnortheast	4 leagues
From Olde to Ornael north, and north and by east	7 or 8 leagues
From Ornael to the south poynt of Stade northnortheast	3 leagues
From the south poynt of Stade to the north poynt, northnortheast	8 leagues
From the north poynt of Stade to Swyno or Swynoost northeast, and northeast and by north	4 leagues
From Swynoe to the outermost of Flowach, or the broade sound, northeast and by east	4 leagues
From the north poynt of Stade to the Iland Hessen, or the Broade-sound northeast	8 leagues
From Hessen to Goedeu east, and east and by south,	3 leagues
From Swynoe alongst without to Roemsdaels schares to Boede, the course is northeast and by north	
From Stade to the north-end of Hitland westsouthwest	66 leagues
From Stade to the east poynt of Island, westnorthwest,	200 leagues
From Stade to Greeneland northwest about	330 leagues

Of the Tydes and courses of the streames.

Betwixt Bergen and Stade the water riseth and falleth, but it keepeth no certaine tyde a southsouthwest, and northnortheast maketh there most full sea.

Betwixt Stade, Luycksound and Boe a southsouthwest and northnortheast moon maketh high Water.

Heights.

The Outweers-rocks lye in	61 degrees
The Iland Kyne in	61 degrees and 30 minutes
Stade in	62 degrees
Broad-sounder or the Iland Goedeu, in	62 degrees and 30 minutes
Luycksound in	62 degrees and 40 minutes
The Stoppels and Boede in	63 degrees and 28 minutes

How these Lands doe shew themselves at sea.



Thus sheweth the Bock, when you are to the southwards of Schuytenes before the Liet.



Thus sheweth the hill Sick, when you are to the northwards of Schuytenes.



The Land about Northfoert and Southfoert, when it lyeth east and by south from you.

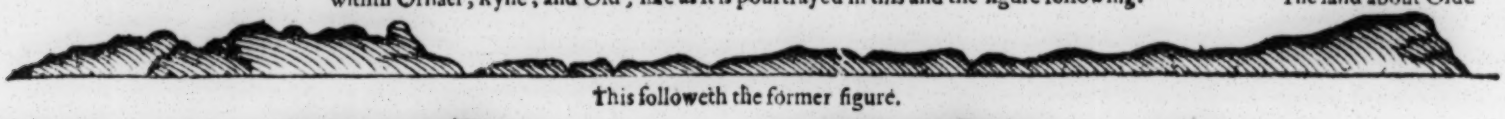
South point of Stade | Ornael | Kyne | Olde



The sheweth the Ilands Ornael, Kyne and Olde, to the ſouthwards of Stade.



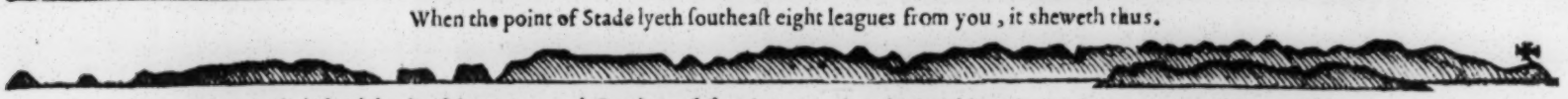
When the ſouth point of Stade lyeth northeaſt and by north from you, then it sheweth with the land from thence ſouthwards within Ornael, Kyne, and Old, like as it is pourtrayed in this and the figure following. The land about Olde



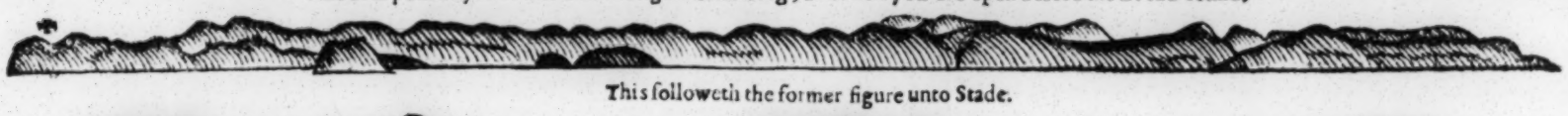
This followeth the former figure.



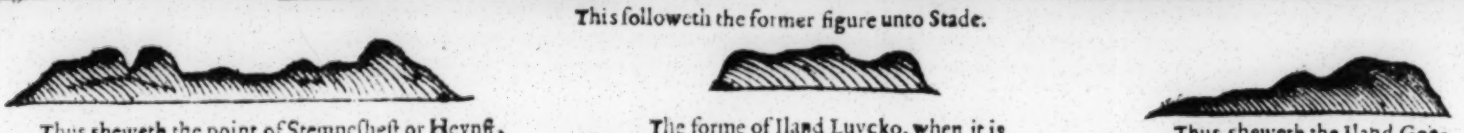
When the point of Stade lyeth ſoutheaſt eight leagues from you, it sheweth thus.



When Stade is ſouthſoutheaſt from you, and Goedeu eaſt four leagues, then the Land betwixt Stade and the Broade Sound sheweth like as is pourtrayed in this and the figure following, and then you are open before the Broad-ſound.



This followeth the former figure unto Stade.



Thus sheweth the point of Stemneſheſt or Heynſt. | The forme of Iland Luycko. when it is eaſt and by north from you. | Thus sheweth the Iland Goedeu, being eaſt from you.

Flenſeu Rooſen Iland Lemſeu Low Iland Harmſoe Luycko.



Stemmesheſt Thus sheweth twe Ilands of Roemſdale, when the midlemoſt of the three higheſt and the weſtermoſt is ſoutheaſt from you about three leagues.



The Ilands of Roemſdale.

Thus sheweth the Land between Stemnesheſt and the Broad-ſound, when as you ſayle a ſeaboard, alongſt by the Roemſdals Ilands and Schares.

The eight Demonſtration,

Where in the Liet of Dronten is shewed.

FRom Stade to Stemmeſheſt (or Stemmeſnes) the courſe is alongſt without the Ilands northeaſt & by north about 26 leagues, the land betwixt them both, is called the Governement of Roemſdael.

Stemmes-Heſt. Stemmeſheſt is a high point good to be knowne, it sheweth it ſelf (when as you get ſight of it, comming from the ſouthwardes or the weſtwards) in two Hommocks thwart of it goeth in the Liet, with divers entries.

About a ſhot of a caſt peece from the point lyeth a black round rock, altogether alone, not very great, called the black Black Ox. Oxe. Betwixt it and the poynt goeth in an entrie, called after the foreſaid rock, alſo the black Oxe) northeaſt and by eaſt, it is not verie wide, and upon the ſhowldeſt 4 or 5 fathom deep at low water, the nearer to the Oxe the deeper, and the nearer to the main land the ſhowlder weter.

A little within the Rock, (the black Oxe) lyeth an other great Rock or Iland, pale of colour, called Whiteholme, which White-holme. you muſt leave (in ſayling) alſo on the larboard ſide, you can not ſaile through betwixt it and the black, Oxe, becauſe from Sunc ken-Rock. the one to the other it is all full of rocks, ſome above and ſome under water.

A little within or to the end of Whiteholm lyeth a ſuncken rock, which you muſt leave alſo on the larboard ſide.

In calm weather or ſmooth water you can not well ſee it, but when it doth blowe any thing hard, you may wel perceive it by the breaking of the ſea upon it. On the ſtarboard ſide within Whiteholm, lyeth a great multitude of rocks, as if they were ſowed along the ſhoare, amongſt theſe rocks a litle within or to Smeer-holm. the eaſtwards of the point of Stemmeſheſt lieth Smeerholme, an Iland, where men may ride under, and lye ſheltred for all winds, except with eaſt & northeaſt windes, which blowe there in open, with thoſe windes you can not alſo come out there, neither with ſouthſoutheaſt, ſouth, ſouthweſt, and ſouthſouthweſts winds, you can not alſo come in there. You muſt ſaile in there from the northwards, behinde the Iland. In the going in (which is not above a cables length broad, eight or 10 fathom deepe) lyeth a little round rock, at high water, about a fathom above water, by which you may runne about on both ſides.

The Vogel Northnorthweſt about a halfe league from the black Oxe, lyeth alſo a greater and broader, but a lower rock, called the Vogel, which at high water lyeth a little above water, but with a ſpring the ſea runneth alongſt over it. Betwixt it and the black Oxe there ſemeth to lye in a broade and wide channell, but betwixt them it is ful of ſuncken rockes, and foule grounds under water: When it is ſmooth water, it is in no wiſe good to runne in there, but in foule weather and with a growne ſea, and and that you can not doe otherwiſe, you might runne in there by the breaking of the ſea.

A great half league northnorthweſt from the Voghel lye yet ſome rocks, lying to the eaſtwardes, called the Newholms, New holms. betwixt them and the foreſaide Rock the Voghell goeth in a broade and large channell, verie cleane without any dangers, which (after the Rock is alſo called the Vogell, there men may ſee all that can doe hurt. The marks for to finde this channell) comming out of the ſea are two hills, verie good to be knowne, which lye from thence eaſt and eaſt and by north within the land. The weſtermoſt is a hil ſomewhat low & round of faſhion, allmoſt like a flat hat, called the Clapmuts. The eaſtermoſt is a Clapmuts and Manhigh ſteepe ſharpe Hill, above on the one ſide with a cutte, gelbergh. like as a ſteepe, called Manghelbergh. When theſe are one in the other, then they are about eaſt and by north from you, and then you are alſo right open before this channell.

For to ſayle in there, keepe theſe two foreſayde hilles one in the other, and ſayle in right with them eaſt, and eaſt and by north, or (when as you come within the Vogel) ſomewhat more eaſterly, ſo that you have the foreſayd Hills out a head a little on the larboard ſide, untill that you come by the main land, and then eaſtnortheaſt alongſt by the ſhoare, (if you be bounde to Dronten) unto the Iland Edou to Edoe.

About a league within the Vogel lye two rockes, the weſtermoſt is high and ſomewhat round, the other is low, and alſo round, and lyeth to the eaſtwardes from the firſt, towards the land, you ſhall runne with the aforeſayd courſe of eaſt and eaſt and by north off from the Vogel, about a ſhot of a caſt-peece alongſt to the ſouthwardes of the two rockes. About half wayes Two ſuncken rocks. betwixt them and the Voghell, (but neareſt the two rocks) lye two ſuncken rocks, theſe you leave with the ſame courſe alſo on the larboard ſide, you may ſee the ſea alwayes breake upon them, except in very ſmoath Water.

You may alſo ſayl through betwixt theſe two foreſayde Rocks and the Mewholmes, to wit, alongſt to the northwards of the rocks, untill you come into the Liet, leaving

these two rocks on the larboard side, and the Mewholms on the starboard side.

Alongst to the northwardes of the Mewholmes and those two foresaide rockes also a channell where men may sayle through into the Liet, then you must leave these two rockes to the southwards on the starboard side, and some other rocks to the northwards of them on the larboard side, and so com also into the Liet.

About three quarters of a league within these two foresaid Rock, lyeth a great suncken rock, right in the middest of the farewaye, which breaketh allwayes, and at low water is uncovered, about which you may sail on both sides. From this suncken rock to Sweggesound, the course is east, and east and by north a league, but the Vogel or black Oxe and Sweggesound are distant about three leagues.

Sweggesound. Sweggesound is a litle Haven behind three great rocks, with a little Iland of an English mile long on the east side of it, when you sayle alongst by it, being but a little off from the shoare, you can not discerne this Iland from the maine land, but it seemeth to be all whole land, he that is not there verie well acquainted, can not perceive that to be an Iland, before that he com close to it, for to runne in behind it. You may sayle into Sweggesound either to the eastwards of that Iland, or to the westwards of it, according as the winde wil serve. To the westwards of Sweggesound or the three foresaid rocks, at the west end of the end of the foresaide Iland lye a great multitude of rocks and foul grounds.

For to saile into the wester channel, you must leave them all on the starboard side, and runne in betwixt them and the three foresaid rockes: when you come to the ende of these three Rocks, you must loofe up to the southwards about by them towards the northeast or north, and anckor there in 7 or 8 fathom, there you shall lye landlockt for all winds, but with a storm out of the west the growne sea can come in rowlingh there through. You may also saile in further behind the rocks, untill you come in behinde the foresaid Iland, in a little narrow Bay, there men doe lye in 2 fathom & a halfe, or three fathom. and also sheltred for all windes. In this Haven of Sweggesound the ships commonly doe lye there to tarrie for the winde. He that is bound to the westwards, may runne out to the southwards of the three foresayd rocks, and he that is bound to the eastwardes, may sayle out to the northwardes, through betwixt the Land and the Iland, but that channel is verie narrow, and not above two fathom deep.

Bremsnes. A halfe league to the eastwards of Sweggesound lyeth the haven of Bremsnes, a little quarter of a league within it on the starboard side standeth a little church, with some houses, which you shall espie behinde a point, when as you are come somewhat within, there dwelleth the Governour of Normer Leen. Men were wonte to come to ankor there to paye custome, but now the Kings Customer dwelleth over against it in little Fossen, so that now at this present, men may eyther goe there, or to little Fossen for to paye there custome, according as occasion doth serve.

For to anckor before Bremsnes, you must looke out for two beackons, which stand by the church upon the water side, thwarte of the innermost is the best Roade, and also the best grounde, let your anckor fall there, in twentie, fifteen, eight or tenne fathome that is neare by the shore, for there it is verie steep rising ground, and make you fast with a hawser to the beakons, there you shall lie landlockt for all winds, you may not also anckor no where thereabouts, then in the foresayd place, by reason of the great depth, and verie steepe grounds.

Little Fossound. Little Fossen or Fossound is a narrowe haven, lying to the northwardes, over against Bremsnes, betwixt two lands. In these two places lie the ships commonly to tarrie for the wind, they that are bound to the eastwards before Bremsnes, and they that are bound to the westwardes in Little Fossen. Men may also sayle from Fossen to the eastwards, through betwixt the foresayde land, and come into Stangwixfioerd againe in roome into the Liet of Dronten, but is a verie narrow channel, and not wel to be done for them which are not there verie well acquainted.

Flessound. Westnorthwest, from the haven of Bremsnes goeth a channell through the rockes called Flessound, after three round Rocks, called three Flessen which lye in a rowe without, the east side of this channel, & thereby is very good to be knowne. A little within the three Flesses, lyeth a great black flat rock, when you are by or in Havens-mouth of Bremsnes is lyeth westnorthwest, or somewhat more northerly from you. For to runne out from thence at that channell, saill right with the aforesaid black rock, and runne to the southwards of it close alongst by it leaving it and the Flesses on the starboard side, (to the northwards of this flat rock and the Flesse it is all full of rocks, some above and som under water) you shall then leave on the larboard side of you, two other round rocks, which you shall see lye about a shot of a cast peece eastnortheast, or northeast, and by east one from the other. When you are come without the Flesses, you shall be without all the rocks, but somewhat to the westwards of them lyeth a great rowe of rocks, lying westnorthwest a good wayes into sea, you may runne westnorthwest alongst by them unto the end: when you are come without the Flesses you may set your course somwhat more northerly, for to get sea room betimes. In this foresaid channell there is no danger, that can hurt you, but you may see it. In the offing you may know this foresaid channell, by the foresaid three Flesses.

Three Flessen.

Freeckol. The markes for to finde Flessound, comming in out of the sea, are two high Hils, the one called Freeckhol, lying upon an Iland, towardes the southeast, not farre from Bremsnes, the other called Northorne, lying farre within the land Freeckhol is a hill with two hommocks where of the southermost is the smallest and lowest. Northorne is a hill much higher, whit a sharp toppe, and lye alwayes white, covered with snowe. When this hill and the foresayde southermost Hommock of Freeckhol stand one in the other (then they are southeast and by south from you) and that you saile in right with then, you shall without fail fall right open before Flessond. It is a channel of a short inlet, and very commodious, as also Grypsound for them which comming from Dronten, Edou, or any other place in the Lieth, and before night can not saile to the channells of the black Oxe or Vogel, for to runne through them into sea.

Northhorn.

Stangwixfioird.

About a quarter of a league to the eastwardes of Bremsnes lyeth Stangwyxfioird, a large broad sound, at the east point lieth a great many rocks, within lyeth a Haven, called Hamersound, you may not com in there but with a Pilot except you be there extraordinari well acquainted.

Hammersound.

A quarter of a league within that foresaid point, on the north side of Stangwycxfioerde lye two lade-places, Iorian wach and Lynwach, men runne in there to the northwardes, behinde some rocks, but it is also Pilots water.

Ioariãwag

Lynwag.

Towards the southeast from Iorianwagh, men may sale farre within the land, into many divers sounds, Stangwicxfiord, Schaelwicxfioird, Northfioird, Walsfioird, Wenningfioird, and other more. Upon the lande of Iorianwagh lyeth the mountaine of Toester, in two hilles, to the eastvvardes of it upon the next land lyeth the mountaine of Stadebuye, also in tvvo hills, as Toester. These hills of Toester and Stadebuy, when you come from the westwardes alongst the Liet, lye right behinde one the other, and seeme then to be no more then one hill, but being thwart of them in the Liet, or at sea, each sheweth in two, which is together foure very high hills, and are commonly called together without difference Toester Poester.

Toester poester.

Soolsound Betwixt Toester and Stadebuye runneth through a narrow Sound, into the Northfiord, called Soolsound. To the east of Stade-buye runneth also another sound through into the Northfioirde, called Emmersound, within which on the north side, close by the northfioird is a lade place, where men do lade good deales.

Emmersound. A quarter of a league in the Liet, to the eastwardes of Emmersound, runneth in another sound, at the entrie broade and wide, within it divideth it selve into two partes. Sayling in there you must leave Fisholme and the Yellowe Iland on the larboard side, and a rockie Iland, called the flat Iland, with manie Rocks on the starboard side. The Yellow Iland is not well to be discerned from the main land, for those which are not there well acquainted, the end of the Northfioird runneth there about behind it and maketh it an Iland. The Norwaze-barkes runne much thereabout behinde it. To the southwards of the flat Iland lyeth a Rock or little Iland, called Flathom, betwixt them both is good anckoring in 10 or 12 fathom, landlockt for all winds.

The Yellow Iland.

Flatholm

Eursound. Through this sounde men doe runne into Eursound, a lade-place lying in the Northfioird, there standeth a little church on the west side of the flatte Iland. Betwixt the little Iland is also a good haven, where men may lye in three, foure, and five fathome, it is not broade but cleane. To the eastwards of this Yellow Iland lyeth the high land of Dromsnes. From thence eastwards, further up into the Liet, towardes Dronten or Agenes, it is most all whole land, and not so broken, as to the westwards of it.

Dromsnes

Thwarte of the rocks of Hammer-sound (lying on the east side of Stangwyxfioird) lyeth a faire channell called Grypsound, one of the best channells for to come in out of the sea in the Liet, it is aboute a quarter of a league broade, and goeth in close to the eastwardes of the Iland Grype.

Grype

Gryp. Grype is a little rounde Iland lying from the Voghell north-eaſt and by eaſt diſtant aboute ſeven leagues, upon it dwell manie Fiſhermen, which goe from thence to ſea, to fiſh upon divers bancks, of fortie, fiftie, ſeventie, eightie, and hundred fathome, foure, five, ſixe, ſeven, eight and ſome tenne leagues without the land, which they knowne to finde by markes on the ſhoare. On the north ſide of Grype there lye but two or three rocks cloſe to the ſhoare, ſome ſaye that thereabout is anckor greunde in twelve fathom. On the ſouth or weſt ſide, it is full of Rocks, but they lye moſt above water. Aboute halfe wayes betwixte Grype and three Fleſſes, ſomewhat without al the other Rocks, lyeth a ſuncken rock a little under water he that runneth alongſt without theſe rocks, muſt be mind full thereof.

Gryp-ſound. For to goe into Grypeſound comming in out of the Sea, you muſt bring the high Mountain of Toeſter Poeſter eaſt ſoutheaſt from you, and ſayle in right with it, and ſo you ſhall not ſayle to runne in ſight of the Iland Gryp, which is good to knowne from the other rocks, by the greate manie Fiſhermenes houſes, which ſtand upon it, and upon no other Iland not Rocks thereabouts, leave that Iland on the ſtarboard ſide, and goe in firſt eaſt ſoutheaſt right with Toeſter, being paſt the Iland Gryp, bringe Toeſter two poynts on your larboard bowe, and goe ſo in ſoutheaſt, and you ſhall come into the Liet betwixt Hammerſound and Toeſter. From thence to the little Iland Edou are about foure leagues. About three leagues to the weſtwardes of it, or a league to the eaſtwards of Gryp-ſound in the Liet, lyeth alſo a ſuncken rock, almoſt even with the water, and allmoſt amidſt the farewaye, neareſt the north ſide, you may alwayes ſee the ſea breake upon it, leave it on the larboard ſide, and runne to the ſouthwards of it, there it is broadeſt, you may for neede run alſo to the northwards of it through betwixt it and the other rocks, but it is there narrow.

Edou. Edou or Edoe is a ſomewhat low plain Iland, a league long, and verie narrow, which is the firſt land out the larboard ſide, upon the Liet, that men have ſhelter of from the ſea, to the weſtwards of it, there is nothing but broken land, Rocks and little Ilands, where the growne ſea cometh rouling in through. Not farre from the weſt end, upon the ſouth ſide of Edou, ſtandeth a little white Church, thwart of it, or a little to the eaſtwards of it, men may anckor in eight, nine, tenne fathome. The ſhoare is ſteep ryſing ground: If men doe come neare it in foure fathome, they ſhall be preſently faſt, but the grounde is ſoft. When as men come from the weſtwards, and will anckor there, they muſt (comming neare the weſt end of the Iland) continually feele with the leade for the anckor ground, and ſo ſoone as they feele it, let fall their anckor, thwarte of the a foreſayde litle white Church, or a little to the eaſtwardes of it, ſo that the little Church come to ſtand over the houſes. When as let fall their anckor in tenne fathome, and wending up towards the land, verie out the cable then the ſhippe ſhall come to lye there in ſixe fathome, the Liet is thereabouts aboute a halfe league broade.

Kurou. Upon the eaſt end of Edou is alſo a little haven called Kurow, and it is ſo little that there can lye no more then two or three ſhippes, there lyeth a little black rock not farre from the ſhoare, men doe runne in betwixt that little rock and the Iland, and anckor betwixt them both, there men lye landlockt for all winds, but the ground there is not cleane.

Glaſeu. At the eaſt end of Edou lyeth another Iland ſomewhat long, called Glaſeu. To the eaſtwards of it runneth a great broade Ramſ-ſoird. Sound into ſea, called Ramſſioird, but it is known of few. With northerly winds there commeth through a great growue ſea into the Liet.

Highland of Hitteré. To the eaſtwards from Ramſſiorde lieth the land of Hitteren, two greate long Ilands, Norther Hitteren, and Souther Hitteren, together about ſeven leagues long, ſo that he that ſayleth up the Liet thwarte of them, can not perceive otherwyſe, but that he ſayleth in betwixt two maine lands. At the

Weroy. ſouth end or weſt end of Hitteren, which is on the eaſt ſide of Ramſſioird two little Ilands, called Weroy, there you may ſayl in betwixt them, and anckor in good white ſand ground, you may alſo ſayle through betwixt the little Ilands, alongſt into the Liet, and then you leave a ſuncken rock lying on the ſtarboard ſide, by the ſouthermoſt little Iland.

Dromſnes. From the Iland Edou to the Highland, or the pointe of Dromſnes it is northeaſt and by eaſt and eaſtnortheaſt diſtant about three leagues. To the weſtwards of that poynt, to wete, betwixt that poynt and the land to the weſtwardes of it called

Schaers-wyke. Schipnes, lyeth a haven called Schaerſwyke. In the mouth of this haven, about the middeſt of the channell, but ſomewhat nearer Schipnes then Dromſnes, lyeth a ſuncken rock, which falleth drie at low water, you may runne in aboute it on both ſides. A little within the poynt, on the ſouth ſide ſtandeth a Countriemans houſe, before which you may anckor in five, ſixe or ſeven fathom, cleane riſing ground, which you may come neare by your leade. This haven lyeth about a league more to the eaſtwards, then Ramſſioird, on the ſouth ſide of the Liet, fitte for to come to anckor in, for thoſe which can ſayl no further by day. To the weſtwards of this foreſaid haven Schaerſwyke alongſt the land of Schipnes, lye maine Rocks by the ſhoare, ſome above and ſome under water, therefore you muſt ſomewhat ſhunne the ſouthſhoare thereabouts, but the north ſhoare alongſt by Hitteren is verie cleane. The Liet is thereabouts a great halfe league broade.

Aboute five leagues to the eaſtwards of Schaerſwycke, on the north ſide of the Liet, lye the two Ilands of Lexen, to wete, Norther and ſouther Lexen, which are together about a halfe league long. There the Liet lyeth betwixt both eaſtnortheaſt, and northeaſt and by eaſt. Lexen.

In ſouther Lexen is a baye, before which lieth a round rock, making in there with in a faire haven, called the haven of Lexen the beſt haven of all the Liet. John Geurtſon Boogart of Amſterdam, hath (at this owne charges, for the commoditie of ſhips that come there) cauſed to be made a great Iron ring: men doe anckor either to the eaſtwardes or to the weſtwards of the foreſaid rock, where they will in ſixe, ſeven or eight fathome, and bring a hawſer on the foreſaid Ring, the further men doe run into the Bight, betwixt the Rocke and the land, the ſhowlder, it is all clean and clear ground.

At the norther end of norther Lexen is alſo a place, where is good anckor ground fit for to make road in. Road under north-Lexen

Over againſt the haven of Lexen lyeth an other haven called Moltow, where the ſhips doe oftentimes anckor in the Harveſt or beginning of the winter, for to ſet ſayle with an eaſtwinde, becauſe they can hardly get to ſayle from Lexen with eaſterly winds. Moltow.

A league to the ſouthwards or to the weſtwards of theſe havens of Lexen and Moltow, on the ſouthſhoare, lyeth a little Iland, whereupon ſtandeth a Warder, called Swanholm which men may ſayle round about; under that little Iland it is good anckoring (as well for them which are bound to the eaſtwards as to the weſtwards) in 4 or 5 fathom good clean ſandground. Swanholm.

The ſouth ſide of the Liet off from Schaerſwycke alongſt to Hegwyke, (which is a league and a halfe, and two leagues by weſt the poynt of Agenes) is moſt cleane with little towle grounds: but from Hegwycke alongſt to Agenes the coaſt is towle and rocky. The north ſide alongſt by Hitteren, as alſo indifferent cleane, except at the north end lye ſome rocks called the Terlingen, which lye ſomewhat off to the ſouthwards from the ſhoare into the Liet. A little to the eaſtwards of Hemneſioird, over againſt Hemneſchell (an Orchard upon a high land (there the Liet is at the narroweſt, and no more then a halfe quarter of a league broad.

Hemneſſioird lyeth over againſt the north end of Hitteren, it is a bay where many Sawes doe ſtand, and abundance of good Deales are cut and laden. Hemne-ſioir t.

To the northwards or eaſtwardes of the Terlingen, at the north end of Hitteren, in betwixt Hitteren and Lexen lyeth a haven called Deepſound, the Norway Barcks (comming from the ſouthwards) runne in there along behind Lexen to the northwards. Deep-ſound.

From Lexen to the poynt of Agenes on the ſouth ſide, or to Euriland on the north ſide, the Liet lyeth alongſt eaſtnortheaſt, and northeaſt and by eaſt three leagues. Agenes is the northermoſt point of the Liet, you muſt go about by it when you are bound to Dronten. Agenes.

Betwixt Norther Lexen and Euriland lye two Ilands, the ſouthermoſt is called Foſſen, the northermoſt Garten, to the ſouthward of Foſſen you may ſail through alongſt into the ſea, but not without a Pilot. Foſſen Garten.

For to ſayle from Lexen to Agenes, runne alongſt by the north ſhore, which is the cleaneſt, the ſouth ſhore is fowle. A cables length or cables length and a halfe to the weſtwards of the poynt Agenes, lyeth a ſuncken rocke not farre from the ſhoare. For to avoid it more other danger, keepe alongſt by the north ſhore (but take heed that you run not in to no bights or bayes) ſo long untill that you can ſee the houſes upon Agenes, then ſayl towards it, and then you ſhal not fayle within any dangers on the ſouth ſhoare. On the poynt of Agenes is alſo great Iron Ring for to more the ſhippes to there by it is deep and ſteepe off-going fowle ground. For to anckor, there you muſt bee very cloſe by the ſhore before you ſhall finde ground, and then you muſt make a cable faſt on the foreſaid Ring. Cloſe to the ſhore it is about five of ſixe fathom deepe fowle ground.

On the north ſide of the Liet over againſt the point of Agenes,

Euriland.

nes, lyeth Euriland, a flat fayro greene land, upon it ſtandeth a little white Church about in Engliſh mile off from the ſhoare within the land, almoſt like the litle Church of Edou, thwart of it is a good road cleane flat riſing ſand, and claye ground, men doe commonly ankor there thwart of the firſt beakon in 7, 8 or 9 fathom good clay ground, 16, 17, or 18 fathom men lye farre from the ſhore.

With contrary windes, or that men can not come about Agenes, or taken with the nigt, they doe anckor moſt commonly there.

By Agenes there runneth out alwayes a great ſtrong current to the weſtwardes, and by reaſon the lands from thence to the ſouthwardes on both ſides are very high, and the winde (being ſoutherly) falleth there betwixt them both, alwayes ſtrong to the northwards, men can not (in ſayling up get any thing there with turning to windewards, but in ſayling off they may het much by the current with turning to windewards.

Salua.

A little about the poynt of Agenes on the ſtarboard ſide, is a great Bay called Salva, wherein is good anckor ground, and good lying, but with northerly winds it is verie hard to com out there for theſe that are bound out, or to the weſtwards.

From Agenes to the poynt of Roobergh, the Liet lyeth ſouthſoutheaſt aboute three leagues. About halfe wayes or ſomewhat more on the weſt ſide lies another bay called Lenſwycke where men may haven roade.

Roobergh. Roade.

Roobergh is a ſomewhat flat poynt, to the eaſtwards or to the northwards about this poynt is good road in 6 or 7 fathom. A good wayes from the ſhoare to the weſtwards of the poynt, the Norway Barks doe oftentimes ankor, but the ground there is not cleane, and therefore it is no good road for great ſhips.

Burſen. Bodwyke.

Over againſt Roobergh lye divers Bayes and havens, as Urkedal, Burſen, Bodwyke and other more, where many Deales are cut and laden.

Holm of Dronten.

From Roobergh to the little Iland or Holm of Dronten, the courſe is eaſt three leagues, when you a little paſt Roobergen, you ſhall ſoone eſpy it againſt the high land to the eaſtwards of Dronten, betwixt them both is wide and broad. From the poynt of Roobergh the land lyeth up to the northwards ſo farre that at ſome places men can hardly ſee over the water.

When you come by the Holm, you may ſayle about within it on both ſides, you muſt bring the Holm to the northwards of you, and anckor to the ſouthwards of it in 6, 7, or, 8, fathom, according as you lye cloſe to it or farre from, it there is cleane clay ground. The Holm and the Elf, or river of Dronten, ly north and ſouth about a ſhot of a caſt peece a ſunder, betwixt them both is every where good anckor-ground, and depth of 20 and 21 fathom.

About a bow-ſhot northeaſt from the Holm lye two ſuncken rockes, which at low water are uncovered. When as they are even covered with the flood, then you may ſayle in over the ſhowldeſt of the Barre into the Elf with a ſhips that draweth 11 foot.

To ſayle into the Elf of Dronten, it is Pylots water, there ſtand commonly two or three maſts for beakons, but there is no certainty of them that men may truſt unto, for they are oftentimes ſhifted: ſometimes they ſtand on the eaſt ſide, ſometimes on the weſt ſide, and alſo ſometimes on both ſides. When you come a ſhips length or two within the beakons you ſhall come to a chindely poynt on the ſtarboard ſide, by which you muſt luff up to the Kay: upon the Barre it falleth with a ſpring tyde almoſt dry, but within it is deeper.

Or the ſtreames on theſe coaſts.

From Stade to Dronten a ſouth and by eaſt and north and by weſt moon maketh high water, with a ſpring it falleth a fathom and a halfe up and downe, with and ordinary tyde ſcarce a fathom.

The tydes run not there alongſt the land, but the flood falleth thwart on againſt the land, end the ebb to the contrary thwart from the ſhore to ſeawards.

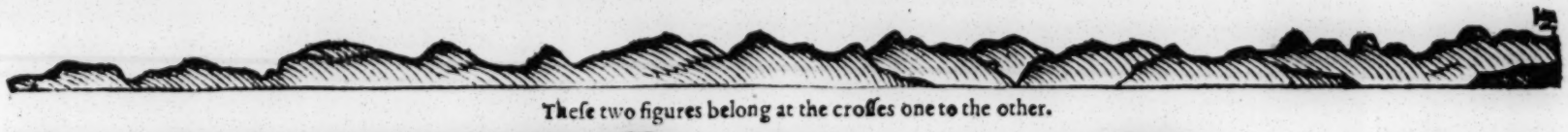
Courſes and Diſtances.

From Stemmesheſt to Gryp northeaſt and by eaſt,	——	7 leagues
From Gryp to the Ilands of Momendall northeaſt	——	18 leagues
From Gryp to Holyland northeaſt and by eaſt	——	27 leagues
From Gryp to Ruſt north and north and by eaſt	——	64 leagues
From Gryp to the north end of Hitland ſouthweſt and by weſt		125 leagues
From Gryp to the ſouth end of Fero weſtſouthweſt,		167 leagues
From Grype to the eaſt poynt of Iſland weſt, and weſt and by n.		233 leagues

Of the heights of the lands.

The Ilands Whitholme and Smeetholme lye in		63 degrees 44 minutes
The Iland Gryp in	—— ——	64 degrees
The town Dronten	—— ——	64 degrees, 34 minutes.

How theſe Lands doe ſhew themſelves at Sea.



Theſe two figures belong at the croſſes one to the other.



The land from Gryp weſtwards or ſouthwards towards Stemmesheſt like theſe two figures here above, when as you ſayle alongſt by it ſeven leagues without the land.

The ninth Demonſtration,

In which the eaſt ſide of England and Schotland, is ſhewed, from the River of Londen to the Newcaſtel.

BY two wayes men may ſayle into the river of London, from the ſouthwards alongſt by the north Forland, and from the northwards alongſt by the Naes. If you wil ſaile in there from the ſouthwards, then you muſt firſt ſhun the North For land, it is there ſhowld a good wayes from the ſhore, bring the North Forland alſo not more ſoutherly from you then ſouthweſt, that you do not run on againſt the northgrounds, which lye farre to ſeawards. Comming by the land, run alongſt by it, but come not to neere it, that you leeſe ſight of the ſpyre of the ſteeple of Margat behind the land, for then you ſhould come to neere it; but if you keepe ſo far from the ſhore, that you can ſee the foreſaid ſteeple above the high land, or keep it even in your ſight, then you can not take hurt of the ſouthgrounds. Comming thwart of Margat, then you are paſt foreſaid ſhowlds or ſouth grounds. Run then boldly towards the ſhore, and within two cables lengths alongſt by it, for to avoid the north grounds, which lye farre to the ſouthwards the land. Sayle on ſo weſt all alongſt by the ſhore, untill that the

Roculvers

Roculvers (which are two ſteeples upon one Church) come one in the other, and then you ſhall run in ſight of the firſt buye upon the Laſts, which lieth upon the foreſaid markes of the Roculvers, being by it you can alſo ſee the other buy which lieth like as the firſt alſo on the north ſide, & over againſt it on the ſouth ſide ſtandeth a beakon, there you muſt ſaile through betwixt them both, leaving the buye on the ſtarboard ſide, and the beakon over againſt it on the larboard ſide. From thence you may with little ſhippes, or ſhippes of little draught, but not with ſhips of great draught, at high water run over the Swallow on weſtnorthweſt towards Scheppy, for it is there ſhould water, with ſhips of great draught you muſt run through the Fiſhers deep towards Black-tayle. You may alſo runne from Margat with ſmall ſhippes alongſt by the ſhoare upon the lead at high water even unto Sheppy, but in ſayling alongſt there you muſt caſt your tydes well, for the flood falleth very ſtrong into the Swallow, and the ebbe to the contrary very ſtrong out.

Sheppy.

When you come by Sheppy, runne within two cables lengths alongſt by it, for to avoid the taile of the Spanjard, untill that you be paſt Quinsbroug, edge then off from the ſouth ſhoare for te avoyd the Noere, which is a ſande that ſhooteth off from the ſouth poynt of the River a good wayes to the eaſtwards, upon the outermoſt end where of ſtandeth allwayes a beakon, whereby you may know it. Run alongſt to the northwards of it, leaving on the larboard ſide, & alongſt in the middle of the channell into the ſea-reach for to avoid the grounds which lye off from the north ſhore, goe in ſo alongſt towards Graveſand.

The Spaynard.

The Noere.

To ſayle with ſhippes of great draughts alongſt by the north Forland up into the Thames, you muſt (when you are paſt the buyes upon the Laſts) ſayle through the Fiſhers deep, towards Black-tayle, which lyeth from the ſecond buye upon the Laſts, unto the firſt buye in the Fiſhers deep, northweſt and northweſt and by weſt, which lyeth upon the north ſide of the ſand, which men doe call the Spanjard, thoſe two buyes lye a great wayes one from the other.

Fishers deep.

Sayling from the buye upon the Laſts it is a great wayes all ſhowld

no

Les Costes d'Engleterre depuis le Voorlandt jusques à Crammer

SCHA

PEIE

Blakeyl

Ridderbo

Margat

t' Voorlandt

Goudsan

Kentsen Vlackte

Westmer

E N

De Roviere van Londen.

T' Amsterdam.
Bij Jacob - Aertsz Colom.

Duijtsche Mijlen 15 in een Graedt
Lieues d'Allemaigne 15 en un degré

Pascaerte
Vertoonende de Mont vande
Teemse en voort de Custe
van Engelandt tot Crammer.

Duijtsche Mijlen 15 in een Graedt

GELANDT

Cramner

Hasselt zijn

Lossing

Hollandts diep

t Nieuwe Sandt

Ardenger Sandt

11 JUG2
MUSEUM

shewld water, so that you must runne over there with high water, but comming neare the buye upon the Spanjard, it is by little and little deeper water. He that will saile over heere, must reckon his tydes well, the flood falleth there alongst towards the southwest almost thwart over the deepe and the ebbe to the contrary.

The second buye in the Fishers Deepe you must leave on the starboard side, and the buye upon the Spanjaerd on the larboard side: being past that, you come against the Blacke tayle, to the southwards of the Shoebeakon into the right deepe. The east poynt of Sheppy shall then lye about south from you. From the Shoe-beakon the course is southwest to the point of Blacktaile, there runneth of a hooke which men micht (at unawares) sayl within (comming from the northwards) in five or six fathom, but if you keep from the shoare in seven fathom, you can not sayle within it. From Black-taile to the beakon upon the Noere, the course is westsouthwest, leave it on the larboard side, as before is said, and runne in alongst the river, in the middst of the channell betwixt both lands unto Gravesond.

For to sayle into the river of London comming from the northwards, you must come neere the coast to the northwards of Orfordnes which is to the northwards of all the sands, there lye Albrough, Dunwich, Walderswike, Sowle and Covehit, all betwixt Orfordnes and Leystaf. Covehit is a sharp steeple like at also Leystaffe, but Sowle and Walderswyke, Albrough and Orfordnes are all flat steeples Sowle and Dunwich lye both upon the high land, betwixt them both is a valley, therein you may see Walderswike when you are thwart of it. Dunwich is the best to be knowne of all these foresayd places: it hath two flat steeples, and on both sides some trees. To the southwards of it lyeth Albrough which is also very good to beknowne; it hath one high flat steeple with three mills, the two stand to the northwards, and the third to the southwards of Albrough when you are thwart of it, but sayling to the southwards, they come at last all three to the southwards of it. The land without Albrough, and the southwards of it is very low flat and chindely land.

Betwixt Albrough and Dunwich about half wayes betwixt them, lieth a Wood which is a both end high, & in the middest low with a saddle; this you shall commonly see first, when you fall with the land thereabouts, and is the best to beknowne for to know the coast by; the land without it, and to the southwards is very low flat chindely land. About two leagues to the southwards of Albrough lyeth Orfordnes, betwixt them both stand also two woods of trees, which shew themselves a farre off like castles or towers. Orfordnes is a flat steeple with a thick or broad castle, which hath also a thick flat steeple, almost of fashion like the steeple of Rarop, open aboven with holes in it like Bellholes.

Before Danwich you may anckor, there is good lying in eight or nine fathom, somewhat soft ground. Before Aelbrough is the best road of all the coast thereabouts in 6 and 7 fathom.

East from Aelbrough about two leagues lieth Aelbrough Knock, this is a sand which at low water is not deeper then seven or eight foote: you may sound round about it in five fathom, but is not good to come nearer it, Which sea winds you may discerne it plainly by the breaking of the sea upon it, but with landerly or westerly windes, and faire weather, the sea breaketh not upon it, hee that runneth thereby to the northwards with an eb, shall see it commonly ripple very much upon it, like as upon most the English bancks, and not indeed the upon banckes, but against them, for upon the showldest or middest of the banckes is alwayes the smoothst water, like as you finde every where.

When as Aelbrough is west from you, and the two steeples of Orfordnes are one in the other, there you shall finde Aelbrough knock. These are sure marks of that sand.

The Whiting, or Whiting sand, is somewhat a long small sand lying before Orfordnes, and the chindely land to the southwards of Aelbrough, and lyeth alongst the reach, but the south end lyeth further from land then the north end, there is at low water not above six or seven foot water upon it. Comming from the northwards, men sayle commonly to the westwards of it, that is through betwixt the land and Whiting-sand, towards the Naze. Men may also sayle alongst to the eastwards of it, through betwixt Whiting-sand and the easter-most poynt of the Court, or Court-sand, which some doe call the Rib.

The north end of the Whiting lyeth alongst close to the shore, and lyeth from the steeples of Orfordnes southeast and by south, it is so exceeding steepe and needle to, that you shall have the one cast nine, the next cast five fathom, and then you are no more but a ships length from it, before you can heave the lead again you should be upon it. When as you sit with the foreship against it, it is at the stearne five or six fathom deep.

Alongst the Inner-side, it is also everie, where so steepe, that you can not sounde it, but on the outher side you may runne alongst by it in five fathom upon the lead, untill you come within the sands.

When as you come from the northwardes and will sayle through whitin the Whiting, you must run close alongst by the shoare, and southvvest about by the poynt of the chindle to the southvvardes of Aelbrough, untill you come vvithin the north poynte of the Whitinge, vvhen the steeples of Orfordnes come to be northvvest and by north from you, then you are right thvvarte of the northpoynt of the Whiting, being vvithin it goe againe more southerly, to vvete, southvvest and by south tovvardes Balsy cliffe.

If you should fall to the southvvards of Whiting, or els comming from the southvvards vvill sayle in there to the northvvardes, then bring the steeples of Orfordnes vvestnorthvvest or northvvest and by vvest, but for all not more northerly then northwest from you, and sayle so right in untill you come by the Chindle strand, then run in alongst by it, as is before saide, and then you shall run far enough alongst to the northwardes of the Whiting.

If you will sayle in to the eastwardes of the southwardes of the Whiting, then bring the steeples of Orfordnes northnorthwest, or northwest and by north, or northwest from you, and sayle in so right with them; untill that the wood of trees, that standeth upon the nexte poynte to the southwardes of Balsy cliffe, come to Balsy cliffe, which shall then stand aboute westsouthwest from you, keepe that a foresaide woode to the southside of the cliffe, and saile in bouldly right with it, and then you shall runne right in the farewaye, in betwixt the Whiting, and the tayle of Courtesandt, but if you bring the foresaide trees more then a handspikes length without the cliffe, you shall not sayle to runne on against the poynte of the Courte. That aforesayd wood of trees is verie good to beknowne, because there abouts stand no other trees.

Or bring the steeple of Balsy westsouthwest from you, and sayle in right with it, untill you come by Whiting-sand, in five or sixe fathom, and leade it in so by it upon the leade, untill that you come by Balsy, or that you get deeper water.

When you come neare Balsy, whether you be come in from the northwardes, or the southwardes of Whiting-sand, you must keepe somewhat off from the shoare, because of a little riffe or small tayle, that shooteth off from the shore, thwarte of Balsy cliffe, which you must avoyde somewhat, with shippes of greate draughts, there remaineth at lowe water upon it no more then two fathome, you may commonly perceive it well by the rippeling of the tyde.

You may also saile into the southwardes, of the Ribbe (that is, the tayle of the Courte or Courte-sand) thus: Bring the steeple of Balsy northnorthwest or a little more northerly from you, and saile in so right with it, and so you shall runne in to the northwardes, to through the Courte, at a channell of eight fathome depth, the east side of this channell is steepe, come no nearer it then eight fathom, but by the west side you may run in aboute by the Court, upon the lead, untill you come within the sands.

Balsy hath a high flatte steeple, and lyeth somewhat within the land behind the cliff, when as you come from the northwards, you may see Balsy to the northwards or the westwardes, of the cliffe, but you sayle it altogether behinde the cliffe, so that at last it commeth out againe to the southwardes of it.

If you will saile to Harwich being past Balsy, then bring Balsy to that steep-poynt to the southwardes of Balsy where trees stande upon, keep these markes so standing, and run so alongst by the shoare, untill that you be over the point of the Chindle, the markes thereof are two high trees within the land, when they are aboute northnorthwest from you, then they come one in the other with the steeple of Harwich, and then you are right over the poynte of the Chindle, and then you shall get deeper water, to wete, foure and five fathome, or somewhat more against the highest water. Runne in then aboute by the poynte, the channell lyeth in right north, but in the midst of the havens mouth lies a suncken rockie and stonie ground, which you must avoide, you may saile in aboute it on both sides, by the one shoare or the other, but alongst by the east shoare it is best, being within it, you can not saile amisse, to take hurte, if you do not saile bluntly against the shoare: there you may anckor al over, where you please, before the towne, in five, sixe and seven fathome. You may well also goe further into the bight, there it is clean everie where. The fareware betwixt

For to sayle into the river off London comming from the northwards.

Sowle Dunwich.

Albrough.

Orfordnes.

Albrough Knock.

Whiting-sand.

The Court

For to runne into the eastwards off the Whiting.

For to sail in at a channell through the Court.

Balsy.

For to sail into Harwich.

twixt Ordfomes or Whitingſand and the Naes lyeth moſt ſouthweſt and by ſouth, and is 6, 7, and 8 fathome deepe, in turning to windewards, you may run to the ſhoare in 5 and 4 fathome, but cloſe to the ſands it is deeper, to weete, 8, 9, and 10 fathome, the nearer the ſands the deeper water.

The Naze. But for to ſayle from Bolſy to the Naze, you muſt marke the ſteeple of Balſy, when it commeth within a capſtone barres length neere to the ſouth end of the cliffe, then keep them ſo ſtanding, ſo long untill that the houſe upon the Naze come over the two fields, which lye on againſt the High land, or come over a black head upon the ſea ſide, ſaile then right in with them, untill that the ſteeple of Harwich come to be northnorthweſt from you in the litle valleye off a redde cliffe, leave then the firſt markes, keepe the ſteeple of Harwich in that little valleye, and goe on ſouthſoutheaſt, untill that the thirde poynte of the Naze come without the two other points, ſo you ſhall run through betwixt the Naze and the courſe, there remaineth at lowe water no more then eight, tenne, and at ſome places twelve foot water, therefore it is not good to run through here, unleſſe that it be a quarter floude or with a ſhippe of greate draught at halfe floude, there it is verie uneven of grounde rockie and ſtonie. The poynte of the Naze is verie ſtonie, foule and uneven, the nearer the ſhoare thwart of that point the ſhowlder, but the nearer the Sands the deepe.

When that the third poynt of the Naze commeth without the two other points or the other land, and that it doth againe beginne to deepe off, to wete; foure or five fathome then go ſouthweſt ſomewhat ſoutherly, or ſouthweſt and by ſouth, unto
Longſand. the buye upon Longſand. Thwart of the Naze is Longſand verie ſteepe, ſo that it can not be well ſounded with the lead by them that are not there verie well acquainted, but ſomewhat more to the ſouthwards, you may run alongſt by it in four fathome and 3 fathome and a halfe, untill that you get the buye upon Longſand in ſight of you. The northſhoare to the ſouthwards of the Naze is alſo flat, you may runne alongſt by it alſo upon the lead, without any daunger.

Buyes upon Longſound and the Spits. The buy upon Longſand lyeth in two fathome and a half at half floud, you muſt leave it on the larboard ſide, and the Buye upon the Spits, on the ſtarboard ſide, which lyeth a little ſhowlder, they lye aboute ſouth and by eaſt and north and by weſt, a musket ſhot one from the other. The courſe betwixt the two buyes is ſouthſoutheaſt and northnorthweſt, but you muſt reckon wel your tyde, wheter you run through there with a flou le
The Spits. or with an ebbe. Upon the Spits, betwixt the two buyes is a halfe floude at leaſt three fathome and an halfe, or almoſt four fathome, in the right channell, a little to the ſouthwardes of
Whitakers beakon. the buye upon the Spits ſtand two maſtes above water, of a loſt ſhipp, which are good markes. Being over the Spits, the courſe to Whitakers beakon is ſouthſouthweſt.

Aboute halfwaie, betwixt them ſtand alſo two maſtes more on the ſame weſt ſide, and over againſt theſe maſtes lyeth a middle plate, whereupon lyeth a buye on the weſt ſide: the fareway is alongſt to the weſtwards of this Middle-plate, through betwixte that foreſayd buye and the maſtes.

Middle-plate. To the northwards of that foreſaid Middle plate, goeth out a channell by the ſouth ſide of Longſand, which you may ſaile out and in, called the Kings-deepe. If you come from Whitakers beakon, paſt the Middle-plate, ſo far that you get ſight of the buyes of Longſand or Spits, goe then bouldly eaſtnortheaſt and northeaſt and by eaſt into ſea, or upon the lead alongſt by Longſand, but if you ſhould runne into ſea, to the ſouthwards of the Middle-plate, you ſhould with an eaſtnortheaſt waye
Kings-deepe. fall within the hooke of the Mouſe. This Kings-deepe is a readie channell, and is uſed almoſt by all ſhippes for to runne out at.

For to ſail into the Kings-deep. For to runne in at this channel out of the ſea, then bring the poynt of the Naze northweſt from you, and ſaile in ſo with it, untill that you come neare Goemfliet or Longſand in five fathom, goe in then alongſt by it about weſtſouthweſt and ſouthweſt and by weſt, and keepe the ſounding of Longſand, and ſo you ſhall not fayle to runne in ſight of the buye upon the Spittes and the foreſaid maſt to the ſouthwards of it.

From Whitakers beakon to the Schoebeakon the courſe is ſouthſouthweſt ſomewhat weſterly, comming thwarte of the Schoebeakon, then lyeth the eaſt poynt of Seppie about ſouth from you. From the Shoebeakon the courſe is alongſt ſouthweſt to the point of Blacktayle, there runneth off a Hooke, which men might ſaile within comming from the northwards: but if you keepe from the ſhoare in ſeven fathom, can not take hurte of it, but in five fathom you runne within it. The like Hooke is alſo a little to the ſouthwards of the Shoebeakon, which you might unawares ſaile within, comming from the ſouthwardes.

From Blacktayle to the beakon upon the Nore, the courſe is weſtſouthweſt. The Nore is a ſand, lying from the ſouth point of the maine land of the river, farre to the eaſtwardes, therefore leave the beakon on the larboard ſide, and goe on weſt alongſt, amidſt the channell into the river, betwixt both lands, as here before hath beene ſaid in the Deſcription of the Fiſhers deepe. Schoebeakon. Blacktaile

From Aelbrough alongſt by Dunwich to Covehit the coaſte lyeth north and by eaſt ſomewhat eaſterly, and ſouth and by weſt or ſomewhat weſterlye five leagues, but from Covehit to Leyſtaf north and ſouth two leagues Aelbrough, Dunwich and the ſands lying thereabouts, are deſcription here before. The Nore.

Sowle. Betwixt Dunwich and Covehit lyeth the haven of Sowle which is a little ſhoulde river, a little within it divideth it ſelf into three parts, upon the northermoſt arme lieth Sowle upon the middlemoſt Walderſwyke, and upon the ſouthermoſt Dunwich. Dunwich.

Covehit hath a high ſharpe ſteeple, thwart of it lyeth a bank not far from land, which falleth almoſt drye at low water, but at half floud you may ſaile through betwixt it and the land in three fathome, upon the outher ſide it is verie ſteepe, ſo that you can not come nearer it then nine or ten fathom. When the ſteeple of Eaſton is weſtnorthweſt from you, then you are to the ſouthwards of the banck, and vvhen the ſteeple of Covehit is ſouthweſt and by weſt from you, then you are to the northwards of it.

Leyſtaf. Two leagues to the northwardes of Covehit lyeth Leyſtaf, and two leagues more to the northwards of it lieth Yarmouth. The ſteeple of Leyſtaff is a high ſharp ſteeple, and ſtandeth a greate musket ſhot within the land from the houſe, ſo that in ſayling alongſt you may bring the ſteeple on both ſides of the houſes. Of from Leyſtaf begin the banck or Holmes of Yaermouth, and lye alongſt to the northwards paſt Yaermouth, untill thwarte of Winter ton, there go divers channels through them, which men may ſail through, upon divers marcks, for theſe that are there acquainted, you may ſayle through within theſe bancks, off from Leyſtaf untill paſt Winterton.

For to com within the bancks of Yarmouth. If you will run through from before Leyſtaf within theſe bancks, then looke out for the firebeakon which ſtand by Leyſtaf, which at two little white houſes, the one ſtandeth beneath upon the chindle on the ſea ſide, and the Innermoſt upon a little hommock, ſomewhat farther within the land. When you come from the ſouthwards, they ſhew themſelves to the northwards of the towne, but come at laſt thwart of it. In the night there is alwayes fired upon then; for to ſail in there alſo by night. Bring theſe foreſayd firebeakons northweſt and by north, or ſomewhat more northerlye from you and ſayle in ſo right with them either by night or by daye, the church of Leyſtaf commeth then to the ſouthwards of the Towne over a Countrie houſe by the water ſide, when you come againſt the channell, there is at low water no more then 3 fathom depth, keep theſe foreſayd firebeakons one in the other, or bring the Innermoſt rather a little to the northwards of the outhermoſt, for to avoyd a little plate, which lyeth on the ſouth ſide of the Deep, but the channell is indifferent wyde, run untill you com againſt the ſtrand in two fathom and a half or two fathome, ſo near as you will or can, and go then up northwardes alongſt by the ſhoare, you ſhall then (being ſayled a little to the northwards) meet with a flat, whereupon remaineth at low water leſſe then two fathom depth, with laden ſhips, you muſt ankor before that flat and ſtay for high water, it floweth there aboute eight foot, up and downe, ſo ſoone as you are over the flat it will be 5, 6, and 7 fathom deep, edge then to the ſhoare, and ſail toward it, and then you come before the Brewehouſe, there is the roade, where you may anckor in 4, 5, or 6 fathome, from thence northward toward Yarmouth alongſt the ſhoare is all over good anckoring and good ground.

Haven of Yarmouth. About an Engliſh mile or ſomewhat more to the ſouthwards of the towne Yarmouth, is the haven of Yaermouth, it hath two vvooden heads, vvhere you muſt ſayle in betvvixte them both againſt the higheſt vvater, vvhen the ſtrongeſt of the floud is ſpent, at halfe floud it is dangeroes, becauſe of the ſtrongh tide, vvhich ſhould lightly carrie you into the bight, againſt the ſhoare, (againſt your vvill) it is alſo beſt to runne in alongſt by the ſoutherhead, there it is deepeſt. At Yaermouth
Rode before Yarmouth. in the roade men doe commonly anckor to the northvvards of the haven, right thvvart of the tovvne, in 5, ſixe, ſeven, or eight fathom, the nearer you anckor to the ſandes the deeper vvater you ſhall have, but all good ſand and ſoft grounds.

If you vvill ſaile into the Roade of Yaermouth through the Holmes, then bring the ſharpe little ſteeple, that ſtandeth to the northvvards of Yaermouth vvithin the land, over the broade

broade caſtle, or bring the mill to the north ſide of the towne: keep theſe marks ſo ſtanding, and goe in ſo weſtnorthweſt, you ſhall find in this cannell not leſſe water, then eight or nine fathom at halfe floud, this channell is called S. Nickolas channell: on the north ſide it is deepeſt being come in, the roade is right before the towne in five and ſixe fathom.

S. Nicholas channell.

Thwart or over againſt the haven of Yaermouth goeth alſo a channell through the Holmes, for to ſayle in through there comming from the ſouthwards, then bring Souton over the north ſide of the haven; the great tree betwixt Northou and that flat little houſe or caſtle, ſayle in right with them, and keep theſe marck ſo ſtanding, untill that you be within the Holms, within them lyeth a plate on the ſtarboard ſide, a litle to the northwards of the haven, called the Middle ground, you may ſayle about it on both ſides, on the inner ſide in 5 fathom, but towards the Holmes, or about to the eaſtwards of it in 8 and 9 fathom.

From Yarmouth to Winterton, the coaſt lyeth north and by weſt and northnorthweſt two leagues.

If you will ſayl from Yarmouth forth through within the banks to the northwards, ſayl along by the land, and keepe e ſounding of the ſhore in 5, 6, or 7 fathom, untill that you have the two firebeacons (which ſtand a little to the northwards of Caſter, one in the other, ſail then right with them, either by day or by night, (in the the night there is fired upon them) you ſhall ſo run over a flat, through betwixt two buyes, which lie each of them upon a tail of a ſand, ſayl bouldlie in with the foreſayd firebeacons, untill you come againe neare the ſhoare, in 5 or 6 fathom, being come by the ſhoare, run then again alongſt by it, and keepe the ſounding thereof as before, al alongſt untill you come before Winterton.

Thwart of Winterton runneth off a dangerous rif, which is dangerous to ſayle about by night, if men doe come to near it, which is upon the end ſo ſteep, that (in three fathom or two fathom and a half) you ſhall not be a ſhips length off from it. But when as you, (comming from the ſouthwards) keep your ſelf in 6 or 7 fathom, then you can not ſayl ſo near to it. To the ſouthwards of that rif upon the land, ſtandeth a firetowre, which is verie good to be knowne, with a firebeakon, and alſo a little white houſe, when theſe come one in the other, then you are thwarte of the poynt of the riffe.

To the northwards of this rif upon the land ſtandeth two white firebeakons, whereupon there is fired by night, for to avoyd this rif. When as you come thwart of the poynt, then are theſe alſo one in the other, ſo that theſe doe ſerve for thwart marks, and the other to the ſouthwards of them for longſt marcks, for theſe that wil ſayle about it from the ſouthwards. Coming from the northwards alongſt the ſhoare in 5 or 6 fathom, untill you come by the firebeakons upon the north ſide, you muſt keep ſomewhat of from the ſhoare, before they come one in the other, or els you ſhould run on againſt the rif. When they are one in the other then they ſtand ſouthweſt and by weſt from you, and when as the firebeakon to the ſouthwards of Winterton commeth to be ſouthweſt, ſomewhat more weſterly from you, then you are thwart of the poynt of the rif: you may not alſo run about far within that riff, for then you ſhowld lightly be foule of the grounds to the eaſtwards of it, eſpecially when you come from the northwards for there it is not ver e wide betwixt them both.

From Winterton to Haesbrough poynt, the courſe lyeth northweſt three leagues.

Betwixt Haesbrough and the Admirals houſe ſtands a ruinous tower upon the ſtrand. When as you keep it and the ſteeple of Haesbrough one in the other comming from the northwards, then you run right upon the poynt of the foreſayd riffe. Foure leagues without the land lyeth Winterton ſand, the ſouth end where of lyeth about eaſt and the north end northeaſt from Winterton.

Thwart of Admirals houſe, not far from the ſhoare, lyeth alſo a little plate where no ſhip can goe over, but if you goe in ſix, or ſeven fathom, you can not ſayle to neare it, you may alſo runne through in two fathome, betwixt this plate and the land.

From Haesbrough to Cromer, the coaſt lyeth alongſt northweſt and by weſt, and weſtnorthweſt, three or foure leagues.

Of the Depts and ſhouldes about theſe places, and in what Depts men may ſee the land.

Five or ſixe leagues north and by eaſt and northnortheaſt from the north Forland or from Margat lyeth a banck, called Kentish-knop, upon it is three fathome water. Being by it, you may even ſee the land from belowe.

Northeaſt and by north from the north Forland nine or tenne leagues, and about eaſt from the Naze, eight leagues into the ſea, lyeth a banck called the Galloper, of five, ſixe and ſeven fathom deep.

The weſtrocks is a ſtonie ground, lying betweene the Court and Longſand, whereupon is no more then two fathom water at a half floud.

Without that ſand or Harwich five leagues from the Naza, it is twentie and two and twentie fathom deepe, being there you may ſee the land.

Thwarte of Orfornes you may ſee the land from below, in two and twentie fathome.

Five or ſixe leagues without Leyſtaffe and Yaermouth ſoutheaſt and eaſt into ſea, it is 27, and 28 fathom deep, there you may ſee the land.

Foure leagues eaſt and by ſouth from land, without the Holmes of Yarmouth lyeth a banck, called the Newland, which is not deeper then two fathom.

Eaſtnortheaſt at leaſt ſeven leagues from land thwart of Yarmouth it is 15 fathom, the ground red groſſe ſand with little round ſtones, being there you may even ſee the land from below.

Thwart of Winterton and Cromer 7 or 8 leagues from the land it is 18, and 19 fathom deep, and there you may ſee the land.

Winterton ſand lyeth 4 or 5 leagues from land northeaſt from Winterton.

What moon maketh high water at divers plates.

At the north Forland a north and ſouth Moone maketh high water.
Within the Thames a ſouth and by eaſt Moone.
Before the Thames, at Harwitch and Orfordnes a ſouthſoutheaſt Moone.
At Leiſtaff and Yarmouth a ſouthſoutheaſt moon maketh high water.
VVithout the bancks of Yarmouth, and before Cromer, a ſoutheaſt moone maketh ful ſea.
Betwixt the bancks of Harwitch and the Holmes of Yarmouth the flood falleth ſouth, and the ebbe north.
Thwart of the bancks of VVinterton and Cromer the flood falleth ſouthſoutheaſt, and the ebbe northnorthweſt.

Of the Tydes and Courſes of the ſtreames.

From the north Forland the flood falleth to the Rocolvers, and over the Brakes weſtſouthweſt, and weſt and by ſouth.

VVithout about Good-win towards Kentish Knock, the flood falleth north and by weſt, and northnorthweſt there commeth the flood alſo againſt it from the northwards, and meet one another by the Gallopper, with very great rippeling and noyſe, (whereof this banck is alſo called the Galloper) and falleth to the weſtwards into the ſands and channels, and alſo to the eaſtwards towards Flanders.

Betwixt the North Forland and Orfordneſſe the ſtreame falleth without the ſands ſouth and by eaſt, and ſouthſoutheaſt.

VVhen you are to the northwards of the Gallopper, then you can reckon no ebbe, then that which runneth alongſt England to the northwards, the ſtreames fall there all alongſt the coaſts. To the ſouthwards of the Gallopper, the ebbe goeth to the contrary, to the ſouthwardes, and the flood to the northwards.

Courſes and Diſtances.

From the north Forland to the north end of Goodwind the courſe is ſouth and by eaſt	one great league
From the north Forland to Kentish Knock northeaſt and by eaſt and N. N. E.	4 or 5 leagues.
From thence to the Orfordneſſe north	12 leagues
From the north Forland to Gallopper northeaſt and by north	9 leagues
From the Gallopper to Orfordnes northnorthweſt	9 or 10 leagues
From the North Forland to the VVielings, the courſe is eaſt ſomewhat northerly about	27 leagues
From the north Forland to the Maſe the courſe is eaſtnortheaſt or ſomewhat more eaſterly about	33 leagues
From the north Forland to the Teſſell or Marſdiep northeaſt	45 leagues
From the Naze or Harwitch to the Maſe eaſt	29 leagues
From Orfordnes to Teſſell eaſtnortheaſt	39 leagues
From Yarmouth to Leyſtaff to VValcheren or the VVicklings ſoutheaſt, and ſoutheaſt and by ſouth	38 or 40 leagues.
From the poynt of Cromer to Schield, to the Teſſell, the courſe is eaſt	40 or 42 leagues.

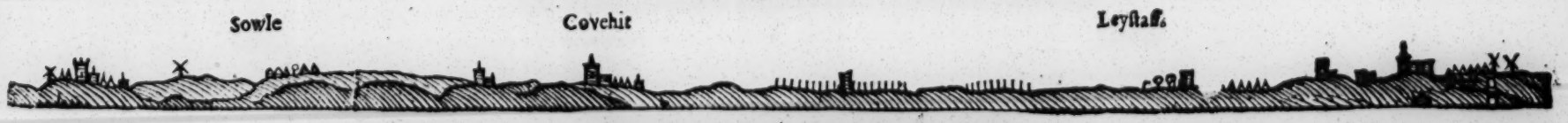
Of the heights of theſe lands.

The North Forland lyeth in	51 degrees 25 minutes
Orfordnes lyeth in	52 degrees 12 minutes

How theſe Lands doe ſhew themſelves at ſea.

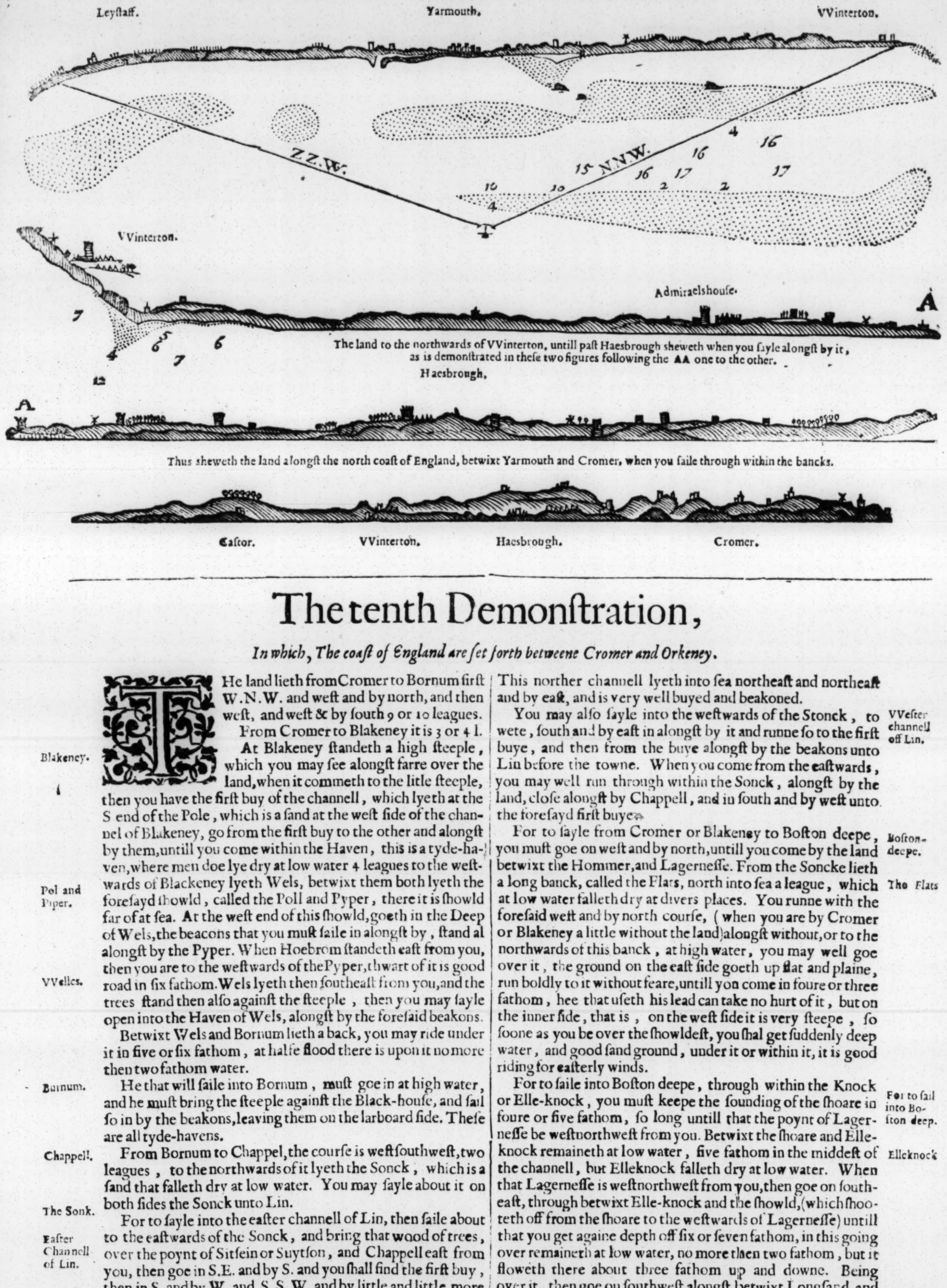


Thus ſheweth the coaſt of England betwixt Orfordnes or Sowle haven.



Thus ſheweth the land betwixt Sowle land Leyſtaff.

Leyſtaf.



The land to the northwards of VVinterton, untill paſt Haesbrough sheweth when you ſayle alongſt by it, as is demonſtrated in theſe two figures following the AA one to the other.

Thus sheweth the land alongſt the north coaſt of England, betwixt Yarmouth and Cromer, when you ſaile through within the bancks.

The tenth Demonſtration,

In which, The coaſt of England are ſet forth betweene Cromer and Orkeney.

THe land lieth from Cromer to Bornum firſt W.N.W. and weſt and by north, and then weſt, and weſt & by ſouth 9 or 10 leagues.

From Cromer to Blakeney it is 3 or 4 l.

Blakeney. At Blakeney ſtandeth a high ſteeple, which you may ſee alongſt farre over the land, when it commeth to the litle ſteeple, then you have the firſt buy of the channell, which lyeth at the S end of the Pole, which is a ſand at the weſt ſide of the channel of Blakeney, go from the firſt buy to the other and alongſt by them, untill you come within the Haven, this is a tyde-haven, where men doe lye dry at low water 4 leagues to the weſtwards of Blackeney lyeth Wels, betwixt them both lyeth the foreſayd ſhowld, called the Poll and Pyper, there it is ſhowld far of at ſea. At the weſt end of this ſhowld, goeth in the Deep of Wels, the beacons that you muſt ſaile in alongſt by, ſtand al alongſt by the Pyper. When Hoebrom ſtandeth eaſt from you, then you are to the weſtwards of the Pyper, thwart of it is good road in ſix fathom. Wels lyeth then ſoutheaſt from you, and the trees ſtand then alſo againſt the ſteeple, then you may ſayle open into the Haven of Wels, alongſt by the foreſaid beakons.

Pol and Piper.

VVelles.

Betwixt Wels and Bornum lieth a back, you may ride under it in five or ſix fathom, at halfe flood there is upon it no more then two fathom water.

Burnum. He that will ſaile into Bornum, muſt goe in at high water, and he muſt bring the ſteeple againſt the Black-houſe, and ſail ſo in by the beakons, leaving them on the larboard ſide. Theſe are all tyde-havens.

Chappell. From Bornum to Chappel, the courſe is weſtſouthweſt, two leagues, to the northwards of it lyeth the Sonck, which is a ſand that falleth dry at low water. You may ſayle about it on both ſides the Sonck unto Lin.

The Sonk.

Eaſter Channell of Lin. For to ſayle into the eaſter channell of Lin, then ſaile about to the eaſtwards of the Sonck, and bring that wood of trees, over the poynt of Sitſein or Suytſon, and Chappell eaſt from you, then goe in S.E. and by S. and you ſhall find the firſt buy, then in S. and by W. and S. S. W. and by little and little more weſterly; untill you come about the poynt, there the buyes and beakons ſhall ſhew you the way.

When you come about the poynt, then you may run through the ſands, into the norther channell, and ſayle out againe by the ſame in to ſea, by the buyes and markes that are thereof.

This norther channell lyeth into ſea northeaſt and northeaſt and by eaſt, and is very well buyed and beakoned.

VVeſter channell off Lin. You may alſo ſayle into the weſtwards of the Stonck, to wete, ſouth and by eaſt in alongſt by it and runne ſo to the firſt buye, and then from the buye alongſt by the beakons unto Lin before the towne. When you come from the eaſtwards, you may well run through within the Sonck, alongſt by the land, cloſe alongſt by Chappell, and in ſouth and by weſt unto the foreſayd firſt buye.

Boſton-deepe. For to ſayle from Cromer or Blakeney to Boſton deepe, you muſt goe on weſt and by north, untill you come by the land betwixt the Hommer, and Lagerneſſe. From the Soncke lieth a long banck, called the Flats, north into ſea a league, which at low water falleth dry at divers places. You runne with the foreſaid weſt and by north courſe, (when you are by Cromer or Blakeney a little without the land) alongſt without, or to the northwards of this banck, at high water, you may well goe over it, the ground on the eaſt ſide goeth up flat and plaine, run boldly to it without feare, untill you come in foure or three fathom, hee that uſeth his lead can take no hurt of it, but on the inner ſide, that is, on the weſt ſide it is very ſteepe, ſo ſoone as you be over the ſhowldeſt, you ſhal get ſuddenly deep water, and good ſand ground, under it or within it, it is good riding for eaſterly winds.

The Flats

For to ſail into Boſton deep. For to ſaile into Boſton deepe, through within the Knock or Elle-knock, you muſt keepe the ſounding of the ſhoare in foure or five fathom, ſo long untill that the poynt of Lagerneſſe be weſtnorthweſt from you. Betwixt the ſhoare and Elle-knock remaineth at low water, five fathom in the middeſt of the channell, but Elleknock falleth dry at low water. When that Lagerneſſe is weſtnorthweſt from you, then goe on ſoutheaſt, through betwixt Elle-knock and the ſhowld, (which ſhooteth off from the ſhoare to the weſtwards of Lagerneſſe) untill that you get againe depth off ſix or ſeven fathom, in this going over remaineth at low water, no more then two fathom, but it floweth there about three fathom up and downe. Being over it, then goe on ſouthweſt alongſt betwixt Longſand and the ſhowld, which lyeth off from the ſhoare, there it is deepe betwixt them both nine and ten fathom, you may ſound both ſides, (as well the ſhowld which lyeth off from the land, as Longſand) in five fathom, but the flat is ſomewhat ſteeper then Longſand.

Elleknock

Longſand

For

Les Costes Marines d'
Engleterre et Escosse
entre Crammer et Orcad

Boston
Batterwyck
Wrangel
Snitsum
Suyen
Capelle
Bormun
Sonck
Flaes
Welles
Blakeney
Wels
Hul
Humber
Grunsby
Salbfleet
Wilgrip
Pasle
Polperen
Hornsey
Sluys
Dunkerk
Calais
Flamborough head

De Noort Cust van Engelandt
tusschen Cramner en
de Revier van
Nieastel

Duytsche mylen 15 een graedt

Spaansche mylen 17½ een graedt

Engel en Fran. mylen 20 een graedt

Nieastel

DVRHAM

Stocton

Hartlepoel

Scarborough

Whitby

Redcliff

Homerby

Southburn

Berrington

Saburnebogh

Romerhoost bay

Fyleigh

Fyleigh strake

De Cuſten van Engelandt
Schotlandt tuſſchen
De Eylanden
Orcanieſe

Duytſche mylen 15 voor een graadt
Spaenſche mylen 17½ voor een graadt
Engel. en Fran. mylen 20 voor een graadt

Edenburgh
Liet ofte Seeton
I. Heinkeff
Caſtel
Dondc
S. Andreas
Broght
Mouros
Abrot
Bas
I. Maij
t Scharp
Gosdyck
Barnsmouth
Dunſtaburgh
Bamborich
Alnemouth
6 t Hilligh eylant
Goutſteen
Plogh
De Schalien
Staples
Coket ofte Colgon eylant

Aberdin

Orcades
Insulæ

PORONIA

XII

BRITISH
11 JU62
MUSEUM

For to ſayle without Elleknock into Boſtons deepe, comming (as is before ſayd) to the weſt land, you muſt looke out for the two ſteeples of Ingoldmills, ſtanding ſomewhat to the northwards of Lagerneſſe, bring them one in the other, and then you ſhall ſtand about northnorthweſt from you, keepe them one in the other, & goe on ſouthſoutheaſt, until that the trees upon the poynt by weſt Lagerneſſe, come without the poynt of Lagerneſſe, and then you runne through betwixt Elleknock and Dogſhead, (that is a ſhowld without Elle-knock) when the aforeſayd trees come a handſpikes length paſt, or to the eaſtwards of the poynt of Lagerneſſe, then goe on ſouthweſt, and then you runne right into the deepe, betwixt Elleknock and Longſand, and ſo you ſhal finde betwixt Elleknock, and the poynt of Longſand five fathom depth, being paſt Elleknock, it will be 8, 9, and ten fathom deep.

Ingoldmils.

Dogshead

If you will ſayle out of the ſea into Boſton deepe, and not alongſt by the land, as is before ſayd, then bring the foreſayd trees a handſpikes length without the poynt of Lagerneſſe, which ſhal then ſtand from you about W.S.W., ſayle in ſo right with them, until that the high land within Lagerneſſe or Winfleet begin to come even without the poynt of Lagerneſſe, which ſhall then be from you ſomewhat more northerly then weſt, then you are within the point of Longſand. Or elſe there ſtand 3 little houſes on the ſea ſide, about halfe wayes betwixt Lagerneſſe, and Ingoldmils, when they come to be N.W. from you, and thoſe foreſayd trees without the poynt, then you are alſo within the poynt of Longſand, goe in then S. W. betwixt Elleknock and Longſand, as aforeſayd. A little paſt Lagernes lyeth a ſhowld or plate about the middeſt in the fareway, but neareſt Longſand when the trees upon the poynt to the ſouthwards of Winfleet come in the ſecond valley of the high land within Winfleet, then you are right thwart of this ſhowld, edge therefore to one ſide or other, rather towards the ſhowld, there is wideſt, keepe boldly the ſounding of the ſhowld, and runne ſouthweſt alongſt by it, untill that the ſteeple of Boſton come over the ſteeple of Butterwyke, that is alſo a flat ſteeple, (but ſmaller then that of Boſton) ſtanding in a wood of trees, thwart of it runneth the ſhowld ſomewhat off with a poynt, being paſt it, goe on weſtſouthweſt all alongſt by the foreſayd ſhowld, untill that the great ſteeple of Boſton come over the ſecond mil, there it is good anckoring by the weſt ſhoare in five fathom at low water. He that commeth there at low water, muſt anckor and ſtay for the tyde untill halfe floud, before that you may not ſail further in from thence, and then you ſhal not alſo find more then two fathom upon the ſhowldeſt.

Butterwyke.

From thence the deep lyeth in alongſt by the beakons about ſouth to third beakon, being paſt that weſtſouthweſt, and then by little and little, more weſterly and northerly, but run al alongſt by the beakons, leaving them on the ſtarboard ſide, at laſt on north into the River.

Upon the poynt of the river ſtandeth a houſe, which is a ſheephouſe, before that you come by it, it ſeemeth as if there were no opening, by reaſon that it is al even green land, run in by it, all alongſt by the land, being paſt it, the river doth open it ſelf. Being come within the poynts you muſt run in betwixt two dikes, a league up untill you come before the towne, in the river it is a half floud everie where deep enough. When as that you come a little within the houſes of the towne on the larboard ſide, there you muſt let fal your ankor, and ſtay untill that the water begin to fal, then you ſhal have floud enough for to drive to the Kay, there you make faſt with one cable, it doth not begin to ebbe there, before that water be fallen three foot.

An eaſt and weſt moone maketh in Boſton deepe the higheſt water, but before the towne an eaſt and by ſouth and eaſtſoutheaſt moone. He that commeth from Boſton, and wil ſaile out at the deep with a high water, let him look out for the foreſaid high land within Lagernes, when that cometh behinde the poynt of Lagernes, then he may boldly ſet his courſe wether he deſireth to be, either to the eaſtwards, northeaſtwards or northwards, there is no then thing that can hurt him.

From Lagernes to the Hommer it is about ſeven leagues, moſt north, betwixt them both, about a league to the ſouthwards of the Hommer lyeth a place called Saltfleet haven, a little to the northwards of a ſharpe ſteeple called Wilgrip. Thwart of that foreſayd Saltfleet haven, about an Engliſh mile from the ſhoare lyeth a bancke or Sandplate, not verie great, which at low water falleth almoſt drye, you muſt runne about without it, and leave it lying towards the land from you, but yet for need you may alſo ſail through within it.

Plate by Saltfleet haven.

For to ſaile into the Hommer comming from the northwards, you muſt ſaile alongſt by the ſhoare, and runne about by the north point, but comming by the pointe you muſt keepe ſomewhat off from the ſhoare in foure or five fathom, for to avoide a little tayle, which lyeth off from the poynt, being about it, runne to the little Iland, which lyeth a little by weſt that foreſaid north poynt.

For to ſail into the Hommer.

If comming from the ſouthwards you deſire to ſaile to the Hommer, then bring the Pawle Steeple (which is a high ſharp Steeple ſtanding on the north ſide of the Hommer) a little by ſouth the north poynt of the Hommer, or over that foreſayd little Iland, and ſayle ſo right in with it, untill that you come by that little Iland, being come by it, leave it on the ſtarboard ſide and run in cloſe by it, for to avoid a great Sand called the Bul, which lyeth off from the ſouth ſhoare almoſt unto that little Iland. When that you come within that little Iland, then bring the two beakons (which ſtand upon that little Iland) one in the other, keepe them ſo ſtanding, and ſayle ſo on the weſtwards towards Grimſby, you leave the buye upon the Bull lying then on the larboard ſide, and run along to the Northwards of it: In this faireway it is ſeven and eight fathom deep. You may not come neerer the Bull then in fixe fathom. Before Grimſby you may anckor in three or foure fathom at low water, it floweth there at leaſt three fathome up and down, a weſtſouthweſt and eaſtnortheaſt moone maketh before the Hommer the higheſt water. Within the foreſayd Iland at the North poynt of the Hommer, you may anckor in three or foure fathom: There lie commonly Schips that are bound out, and tarrie for the wind.

Road before Grimsby.

From Grimſby in alongſt to Hull, the courſe is weſtnorthweſt to the end of the bancke or ballaſt plate, which you muſt leave lying on the north ſide. On the ſouth ſide lyeth also a little plate, there ſtandeth commonly a Beakon upon it, that you muſt leave on the larboard ſide, and run along to the northwards of it, being paſt it, you may run alongſt by the ſouth ſhoare in three fathom. The faireway there is foure, five, and ſixe, and thwart of the foreſaid Beackon eight and tenne fathom. When you come to the end of the Banke, you muſt edge up to the weſtwards about by the poynt on the ſouth ſide, but there runneth off a Flat which you muſt avoid. Being a little about that poynt you ſhall ſee the Towne of Hull, lye before you, there you may anckor before it in ſixe, ſeven, or eight fathom: An eaſt and weſt moon maketh full ſea before Hull. He that will anckor upon the ballaſt plate, let them bring the flat ſteeple which ſtandeth a little to the northwards or the eaſtwards of Hull to the high poynt of Pael, and keepe them ſo ſtanding untill that he come to the plate, there it is beſt for to anckor upon it.

From the north poynt of the Hommer called Spurne head to Flambrough head, the courſe is north and by weſt eight or nine leagues, betwixt them it is ſhowld water of ſix, ſeven, and eight fathom deepe. Flambrough head hath many white ſpots and Chalke Hils, eſpecially upon the north ſide towards Fyley. Flambrough hath a Head or Piere. A leagues to the weſtwards of it on the ſouth ſide lyeth a little Towne called Burlington, which hath alſo a Piere. You may anckor there in the Baye in ſix or ſeven fathom.

Flambrough-head.

Burlington.

Three leagues by weſt Flambourgh head lyeth Fyley, in a rounde bay to the ſouthwards of a poynt that lyeth out, which hath a Pier or Head, where you may lye within it, but it falleth there drie at low water.

Fyley.

Without the head of Fyley lyeth a rock under water, called Fyley bridge, betwixt it and the Pier you may well lie aflote with a ſhip of an hundred laſts, in five fathome at low water, and have ſhelter for a northeaſt and eaſt winde.

Fyley Bridge.

From the poynt of Fyley to Scharbrough it is northweſt two leagues Scharbrough hath two Pieres or Heads, where you may runne within them at high water from the ſouthwardes, but at low water it falleth there alſo drie. Men com in there from the ſouthwardes.

Scharbrough.

From Scharbrough the coaſte lyeth alongſt by Robbinihoods bay, untill before Whidbye, moſt northweſt, but paſt Whidbye the land falleth in weſtnorthweſt, and by little and little more weſterly unto the Tees.

Robbinhoods bay Whidbye.

Robbenshoods bay is a good roade for a ſouthſouthweſt and weſt winde, men lie in 7 or 8 fathome.

Whidby is a tyde haven, which falleth drie at lowe water, at the eaſt ſide of the haven runneth off a riffe of rocks, where of you muſt take heede. For to ſaile in there, you muſt runne in betwixt the two beakons, untill that you come in betwixt the two lands, and anckor there.

From Whidbie to the Teeſe the coaſt lyeth moſt weſtnorthweſt, and weſt and by north, about ſeven leagues, betwixt both lye Huntley foot and Reddecliffe. Huntley foote is a high hill, lying on the ſea ſide, about four leagues to the eaſtwards of the Tees. Reddecliffe about halfe wayes betwixt Huntleyfoote and the Tees, it is a cliffe off ſuch verie redde earth,

Hundleyfoot.

Redcliffe.

that when the ſunne doth ſhine againſt it, it is to ſee to like redde cloth: theſe two are very good markes, for to knowne this coaſt by.

Cloſe to the ſouthwards of the mouth of the Teeſe lye three Riffes, which lye about a halfe league eaſtnortheaſt into ſea, which are verie foule and ſtonie, and fall drie at low water, upon the north ſide they are verie flat, ſo that you may ſounde aboute by them, in five, ſixe and ſeven fathome, but on the ſouth ſide are ſo ſteepe, that comming neare them, and ſounding in 13 and 14 fathom, you ſhould be upon them, before you ſhould beable to heave the lead the ſecond time.

A league and a halfe to the northwards of the Teeſe lyeth Hartlepoole, upon a poynte that lyeth out almoſt like an Iland. For to goe in there you muſt runne in to a bight to the ſouthwards of the towne with in a head, untill you come againſt the towne, there you ſhall lie drie at low water.

Hartlepoole. About halfe waies betwixt Hartlepoole and the Teeſe, runneth off alſo a riffe of rocks thwart from the ſhore a good wayes into ſea, come no nearer it, then 5 or 6 fathom. There ſtandeth a mill to the northwards of the towne Hartlepoole, if you keepe that to the weſt ſide of the towne Hartlepoole, then you can not ſail upon that foreſayd riff, but if you bring the foreſaid mill a little to the weſtwards from the town, ſo that you may plainely ſee through betwixt the mill and the towne, then you ſhall not faile to faile upon that riffe.

For to fayl into the Tees. For to fayle into the Teeſe comming from the northwards, you muſt obſerve theſe markes following. A good wayes to the northwards of Hartlepoole, a little to the ſouthwards of Sonderland, and a litle within the land lye upon the high land, two hommocks cloſe one to the other very good to beknown, The Paps. off faſhion like wornens breaſts, called the Paps, keepe theſe two hommocks even without the poynt of Hartlepoole, which ſhall then ſtand from you northweſt and by north, and fayle ſo on to the ſouthwards, and you ſhall fall before the Tees, and ſhall not fayle to neare the ſands that lie out before the mouth of the Tees, and lye off aboute a halfe league into ſea.

On both ſides, as well on the north ſide, as the ſouth ſide of the Tees ſtand two little white houſes for firebeakons: If you come from the northwardes and get ſight off them, then Bring firſt the two ſouthermoſt one in the other, which ſhall then ſtand from you ſouth and by eaſt, fayle right in with them, untill that the other two, which ſtande on the north ſide of the Teeſe, com alſo one in the other, them leave them on the ſouth ſide, & fayle in right with them that ſtand on the north ſide, & ſo you ſhall run in amidſt the channell, there is upon the barre, or ſhouldeſt, at low water no more then five foote, but it floweth there with a common tyde, at leaſt two fathom up and downe. A ſouthweſt moone maketh there full ſea. If when you come from the ſouthwards, you will fayle into the Teeſe, then bring the innermoſt of the two firebeakons (which ſtande on the north ſide (at leaſt a handſpikes length, or the length off a capſtone barre, to the northwards of the other, and runne ſo weſtwards towards them, untill that the two fire beakons on the ſouth ſide are one in the other, then faile in right with them, as hath beene ſaide, untill that the two firebeakons on the north ſide come one in the other: when you have them one in the other, runne in right with them, untill that you come by the north ſhore, and then cloſe alongſt by it.

When as that you come ſo farre in paſt the firſt fire beakon, to wete, that you may ſee Hartlepoole betwixt the two firebeakons, there you may anckor in three, four or five fathome, or when Hartlepole commeth betwixt the foreſayd firebeakons, then go ſouthſouthweſt, untill that you come by the ſouth ſhoare there it is alſo good anckoring. Further it is pilots water unto Stockton, for there within, the deepes doe ſhifte oftentimes, & that in ſhorte time, 3, 4, or 5 times in a ſummer.

He that will fayle in there with northerly windes, and a floud, muſt reckon well his tydes, for the floud falleth ſtrong to the ſouthwards over the grounds, and ſhould there by bee lightlie carried behinde the bank to the ſouthwards off the buye which lyeth upon the poynte of the banck.

For to fayl in to the newe-channell. Beſides this foreſaide channell there runneth yet another channell through the grounds, which lye off from the north poynt of the Tees. For to fayle in there, you muſt take marke of the two high lands within the land, to the ſouthwardes of the Tees, bring them within a handſpikes length one to the other, or bring the Paps to the weſt ſide of Hartlepoole, then ſhall alſo the two high lands come within a handſpikes length neare one to the other, fayle in right with them, and ſo you ſhal runne right into that new channell, alongſt through that foreſayde ſand, and come againſt the buye (upon the ſandes, on the ſouth ſide off the Deepe) againe in the right farewaye. When that you get again deeper water, or have the two firebeakons on the north ſide one in the other, then goe in towards them, and further as hath been before ſaid.

About ſeven leagues to the northwards of the Tees lieth the river off Sonderland, a little to the northwards off the Paps, which are very good markes for to know the land by there abouts. When the Paps are S. S. W. from you, and that you are about an Engliſh mile from the land, then you are right before the river of Sonderland, the ground is there abouts indifferent cleane, but ſomewhat ſtonie, you may anckor there in 4, or 5, and 6 fathom. On both ſides, as well on the north poynte, as the ſouth poynte of the River it is ſtonie. On the north poynte ſtandeth a beakon in the water, there you muſt runne in; within a little ſhippes length alongſt by it, being paſt that you ſhall gette deeper water, to wite, a fathom and a halfe, and two fathom at low water, but upon the barre remaineth no more then three foote. With a common ſpring, and high water there is about two fathom and a half, or a little more.

Sonderland. After this aforeſaid firſt depth of a fathom, and a halfe or two fathom, you ſhall meete againe with a ſtonie floore, about three ſhips lenghts broad, upon it is at high water about eleven or 12 foote deep, according as the tydes ſhal runne: being over there, it is again deeper. A little paſt that is a narrow place, where a long ſhippe ſhall ſcarce be able to wend, within it, it is wide enough, and very where good anckorground.

From the Tees to Tinmouth the courſe is N. N. W. 8 or 9 leagues. Two leagues to the ſouthwards of Tinmouth lyeth the poynte of Sonderland, but cloſe to the ſouthwardes off Tinmouth goeth in the river of Newcaſtle. From the point of Tinmouth ſhooteth off a ledge of rocks, you muſt fayle in by it on the ſtarboard ſide. The markes for to fayle into this River are two firetowers or firebeakons, which ſtand upon the north ſhoare, bring them one in the other, or the innermoſt (that is the higheſt) a little to the northwardes of the outermoſt or loweſt, and fayle ſo right in, alongſt by the aforeſayd ledge of rocks on the N. ſide, and ſo you ſhall have upon the ſhouldeſt 2 fathom at halfe floud, a S. W. moone maketh there ful ſea. The ſouth ſhoare is flatte you may lead it in there with the ſounding pole, for ſhips, that goe not deepe, in ten foote at halfe floude. When you come within, runne all alongſt by the north ſhoare, untill paſt the little towne Sheels, edge then over to the other ſhoare, untill you come through the crooked reach, there the river lyeth up againe a little to the northwardes, and then to the ſouthwards to Hawkes-bill, and about by it to the towne Newcaſtle.

Bly. Seven or eight leagues to the northwards of Tinmouth lyeth the Cocke Iland, betwixt them both about halfe wayes lyeth a River called Bly, where the French men doe much fayle to fetch coale. From the N. poynt of this river runneth off a ledge of rocks a great ſhot of a caſt peece, about ſoutheaſt into the ſea. but the ſouth ſide, and the coaſt to the ſouthwards of it, is very cleane and ſand-ſtrand. Upon the ſouthpoynt ſtand two beacons: If you will fayle in there, bring them one in the other, and fayle in right with them, and then you can take no hurt of the foreſayd ledge or riffe of the northpoynt. When that you come by or thwart of the outermoſt of the two foreſayd beacons, you ſhall ſee there by it another ſmaller beacon, that ſtandeth upon a little ledge off Rocks, that ſhooteth of from the ſouth point, leave that on the larboard ſide, and runne in alongſt cloſe about northwards of it. The foreſayd ledge of Rockes on the northſide remaineth at high water, (a good wayes from the land, and alſo at a ſpring-tyde) above water, within it is a bight, there it is good lying for a north or northeaſt winde, and there remaineth at low water two fathom depth. In the mouth of the River it is with an ordinary tide and high water about two fathom deep, or ſomewhat more, and it floweth there two fathom up and downe, ſo that at low water it falleth allmoſt altogether dry.

Cocket Iland. The Cocker Iland, is a very little Iland, and not high it lyeth about a halfe league from the land, you may come to ankor in it for an eaſt, and ſoutheaſt winde, but the winde comming to the northwards of the eaſt, maketh there a bad roade, for you muſt lye betwixt the Iland and the maine land where you have no ſhelter for a north winde. On the ſouthſide of the Iland the grounde is foul, and a little to the ſouthwards of the Iland, runneth off a foule ledge of rocks from the ſhoare, untill thwart or paſt the Iland. He that commeth from the ſouthwards, muſt keepe the Caſte of Bambrough without the Iland, or els he ſhould not faile to faile upon the poynt of that foreſayd ledge.

Betwixt that ledge and the Iland it is alſo very narrow, ſo that a man ſtanding at low water marke upon the rockes of this ledge, ſhowld allmoſt be able to caſt with a ſtone unto the Iland. For to fayle in there, take heed unto theſe marcks hereafter

after deſcribed: there ſtandeth a houſe upon the ſea ſide, which is a ſalt kettel, and alſo a caſtle ſomewhat further in within the land, which doth ſhewe it ſelf high enough, bring them one in the other, and then they ſhal ſtand ſomewhat more northerly then weſt from you, and runne ſo right in with them, and ſo you ſhall runne in right amidſt the channell betwixt both; being come within, edge up behinde the Iland, and anckor there in 5 or 6 fathom.

About this Iland there run alſo manie more divers little Rivers, into the land, but they fal moſt drie at low water.

Staples. From the Cocket Iland to the Staples, the courſe is northnorthweſt eight or nine leagues. The Staples, that are high Ilands and rocks right to the eaſtwards of Bambrough, lying at leaſt three leagues from the land northeaſt into ſea, a little to

Holy Iland. the northwards of them lyeth the Holie Iland. To the ſouthwards or the weſtwards of the Holie Iland is a baye, where you may lye landlockt almoſt for all windes, againſt the Caſtle is the beſt roade: you may alſo runne in there from the ſouthwards, through betwixt the Staples and the maine land.

Betwixt the Staples and the Holy Iland lye two ſuncken Rocks, which at low water come verie neere even with the water, the weſtermoſt towards the Holy Iland, is called the

Goldſtone Plough. Goldſtone, the eaſtermoſt by the ſtaples, is called the Plough. For to avoid them when you will ſayle through betwixt the Staples and the Holy Iland, wheter you come from the ſouthwards or the northwards, then bring the Steeple of Teuſtenbrough over the Caſtle of Bambrough, and keepe them ſo ſtanding, and then you ſhall run through betwixt them both, this channell lyeth ſo through northeaſt and ſouthweſt. From the outermoſt end of the Staples to S. Abbens head, the courſe is northweſt ſeven or eight leagues.

From Holy Iland to S. Abbens head it is northnorthweſt ſeven or eight leagues.

S. Abbens head. To the northwards of S. Abbens-head men doe runne in unto Liet to Edenbrough in Scotland.

S. Abbens head and the Iland the Bas lye eaſt and weſt four leagues aſunder. The Iland May and S. Abbens head northweſt and ſoutheaſt foure great leagues. May and Bas lye one

The Bas. from the other ſouthweſt and by weſt and northeaſt and by eaſt three leagues and a halfe. The Bas is a high round Rocke cleane round about, which you may ſayle alongſt by on both ſides. Betwixt the rocke and the ſouth ſhoare it is ten and 12 fathom deepe, but the common fareway is alongſt to the northwards of it. Betweene S. Abbens head and the Bas it is moſt

Iland May. part a clean Coaſt, but without anckor ground. The Iland May is greater then the Bas, and alſo cleane round about, except on the eaſt ſide, there it is foule.

Inchkieth. From S. Abbens head alongſt to the northweſt of the Bas, the courſe is weſt and by north and weſtnorthweſt foure leagues, and from by north the Bas to the Iland Inchkieth weſt and weſt and by north about five leagues. Betweene the Bas and Inchkieth by the ſouth ſhoare lye many Rockes, little Ilands and foule grounds, where at divers places is road, but are not to be uſed, but by them which are there very well acquainted. Inchkieth and the Iland May lye ſouthweſt and by weſt, and northeaſt and by eaſt ſeven great leagues aſunder. Inchkieth is ſomewhat a long ſmall Iland, a league to the northwards of it lyeth an out poynt on the north coaſt, called King-

Kingorneſſe. orneſſe, before it and about it lye ſome little Rocks under water, but a little to the eaſtwards of the poynt is good anckor ground and road for weſterly winds. Betweene that poynt and the Iland May, or the poynt of Fifsnes on the north ſhoare lye divers little havens, where of ſome of them doe alſo yeeld out coales, but are little or notting uſed by the Hollanders. On both ſides of Inchkieth is good ground, and good lying as wel for weſterly as eaſterly winds.

Liet. From Inchkieth to Liet it is ſoutheaſt a league. Before Liet about halfe an Engliſh mile from the ſhoare lyeth a Rocke upon which ſtandeth a maſt (with a croſſe or ſome other thing of wood upon the top of it) for a beakon. At high water the ſea floweth over it, and low water it falleth dry. With a ſpring tyde at low water men may goe on foot to it. From the eaſt ſide of that Rocke lyeth off a riffe almoſt unto Inchkieth. You may alſo run through to the ſouthwards of Inchkieth betwixt that foreſayd riffe and the ſouth ſhoare, but it is not to be done, but by them which are there exceding well acquainted: There is altogether full of Rockes and foule ground. When as you ſayle in to the northwards of Inchkieth you muſt leave the foreſayd Maſt on the larboard ſide, and run about to the northwards of it, and then towards the ſouth ſhoare, and anckor about halfe an Engliſh mile by weſt Liet, and alſo halfe an Engliſh mile from the ſhoare, in ſixe, ſeven or eight fathom. Liet the Haven Edenbrough, at tyde Haven which falleth dry at low water.

From Liet to Queenes Ferrie there lye on both ſides many Rockes, ſome above and ſome under water. In the Narrow before Queenes Ferrie lyeth a little Iland called Inchgarve which you muſt runne alongſt to the northwards of, on the ſouth ſide it is with a Stone bancke (where men may goe over at low water) faſt to the mayne Land, alongſt to the northwards of it, it is cleane and deepe. Within that little Iland lye Caryn and other places more where men doe lade Coales. Queenes Ferie.

Under the eaſt ſide of the poynt to the northwardes of Queenes Ferrie is good road in 2, 3, or 4 fathom, according as you lye farre from the ſhoare.

A league north from the Iland May lyeth the poynt of Fifsnes, lying from S. Abbens head northweſt and by north five great leagues. From thence to Dondee it is northnorthweſt Dondee five leagues. Dondee is a good Haven which goeth in betwixt two high Lands, being within men doe anckor before the Towne. Farther in upon the River lyeth another Towne called S. Iohns, which you may goe up to at high water. Fifsnes. S. Iohns.

Betweene the poynt of Fifsnes and Dondee lyeth alſo the Baye of S. Andrewes, there is all over good anckor ground. S. Andrewes. Foure great leagues N. and by E. from the poynt of Fifsnes, and northeaſt from S. Andrewes lyeth a great Rocke called the Inchkap, which the Sea floweth over at high water, and at low Inchkap. water it falleth ſo dry, that the Fiſhermen goe upon it.

Monroſſe. Seven leagues to the northwards of Dondee lyeth Monroſſe, a good haven. Firſt you muſt ſayle in there amidſt the channell, and then edge up to the northwards and anckor before the Towne.

Redhead. Betwixt Dondee and Monroſſe lyeth an out poynt called Redhead, about a great league to the ſouthwards of Monroſſe. There ſtandeth a high tower upon the land called Albrot.

Stone Baye From Monroſſe to Stone Baye or De Torre, the courſe is northeaſt and by north foure leagues. This is a deepe bay and a good Haven for theſe that are bound to the ſouthwards, where men may lye land-lockt with many Schips.

Aberdyn. Three leagues to the northwards of it lyeth Aberdyn: In this Havens mouth it is three fathom deep. The weſt poynt is ſomewhat foule, therefore you muſt run in by the eaſtland, untill you come within the haven, and anckor before the towne in foure or five fathom. Up to the northwards is a great Bay, but is ſhowld on both ſides. There goeth through a little Creeke towards old Aberdyn, which is an old ruinous towne.

Boockenes. From Aberdyn to Boekenes the courſe is northnortheaſt twelve or thirteen leagues. Betwixt them both lyeth a tyde Haven. Boeckenes is a high Hil land lyeth upon the ſouth ſide of the poynt. To the northwards of Boockenes lyeth a Bay as a Haven called Spy or Spilaert. From thence the land lyeth Spy. in weſt and weſtſouthweſt unto the Haven of Roſſe or Luvernes.

C. Terbat. To the northwards of Roſſe lyeth an out poynt called Cape Terbate, right in the buttome of the Baye betwixt Catnes and Boockenes, diſtant from Boockenes about 19 or 20 leagues. In this baye manie havens and ſounds, which are deep enough for to come into with great ſhips. It is from thence to Catanes 26 leagues N.E. and by N. Catanes lyeth from Boeckenes N.W. and N.W. and by N. 21 or 22, 20 leagues. From Boeckenes unto the outermoſt Orckanes it is north and north and by weſt two and thirtie or three and thirtie leagues.

The Orckeneys are one and thirtie Ilands in number, firſt Wayets or Elhoy, which lyeth next to Scotland, five leagues about the poynt. About N.N.E. off from the poynt of Catenes lye two little Ilands. Pits and Pichlantsſcare there you may run through to the weſtwards betwixt Ilhoey and Scotland.

To the northwards of them lyeth an Iland called Heynda, with an other Iland called Platto, to the northwards off Platta lyeth Mayland or Ponoma. On the north ſide of this greate Iland are all the havens where the ſhips come to.

Upon the eaſtſide of this great Iland lieth an other Iland called Kabunſa, to the northwards of it lyeth an other Iland at the northeaſt poynt of the greate Iland, you may alſo runne through there towards Papeweſter, and leave Sand a lye on the ſtarboard ſide.

Cloſe to Papeweſter lyeth Fara, to the ſouthwards of it is Sirza. To the eaſtwards of Sirza and Fara lye two Ilands, in the middeſt of all theſe Ilands, called Eeda and Chapnoza.

Sanda lyeth to the northwards of all theſe Ilands, but Papa and Stronza lye to the ſouthwards of Sanda.

To the eaſtwards of Stronſa lyeth an Iland called Cuiſtella, that is the eaſtermoſt Iland of all, the northermoſt is called Ronalze or northernanſe.

Eleven or twelve leagues northweſt from the great Iland lye two rocks, the one under water and the other above water, he that commeth from the weſtwards, muſt take heede of them.

Of the Depts and shouldes about theſe places, and in what Depts men may ſee the land.

Thwart of Winterton and Cromer, ſeven or eight leagues from land, it is eighteene and nineteene fathom deepe, and there you may ſee the land. North-eaſt and northeaſt and by north from Cromer lyeth a Bancke, whereupon remaineth at halfe floud no more water, then 4 fathom, from thence you may ſee the land indifferent well.

North and by East from Blackeney lyeth a bancke, whereupon remaineth at halfe floud no more water then five fathom. In eighteene fathom thereabours you may ſee the land. From thence to the point of Chappell it all should.

About northnorthweſt and north and by weſt from Winterton-ſand lyeth the bancke before Crommer 5 leagues without the coaſt.

To the northwardes of the Hommer of Hull, you may ſee the land in 25 fathom.

Flambrough-head men may ſee in five and thirtie fathome.

Scharbrough men may ſee from below in five and fortie fathom.

Of the Tydes and Courſes of the ſtreames, about theſe foreſayd places.

Before Cromer a Southeaſt Moone maketh high water.

At Blakeny, Wels, Bornum and Lyn, an eaſt and weſt Moone.

Before the Hommer of Hull an eaſtnortheaſt and weſtſouthweſt Moone.

From Blackeny to Flambroug-head, the floude falleth ſoutheaſt and the ebbe northweſt.

At Flambrough and Fyley, in the Deer a weſtſouthweſt moone maketh full ſea.

At Scharbroug and Robbinhoods-baye a ſouthweſt and northeaſt moone.

In the Tees and at Hartlepoole alſo a ſouthweſt and northeaſt moone.

Before the River of Newcaſtle a ſouthweſt and northeaſt moone maketh alſo the higheſt water.

Thwart of Flambroug-head, Scharbrough, the Teeſe, and alſo thwart of the river of Newcaſtle, the floud falleth ſoutheaſt, and the ebbe northweſt.

To the northwards of the Tees, the floude falleth ſouthſoutheaſt alongſt the land, and from the Tees to Scharbrough ſoutheaſt and by eaſt.

On theſe coaſt betwixt Tinmouth and S. Abbens-head a ſouthweſt and northeaſt moone maketh high water.

At Liet in the Haven a ſouthweſt and by weſt moone maketh full ſea.

The floud falleth alongſt theſe coaſtes ſouthſoutheaſt and the ebbe northnorthweſt.

At Orcaneſſe and Boecknes a ſouthweſt and northeaſt moon maketh high water.

The floudes come about from behind Scotland from the weſtwards through betwixt Fayrhill and Orcaneſſe, and make thereabout full ſea with a ſouthweſt and northeaſt moon.

From Boeckeneſſe, the floud falleth ſouth alongſt the coaſt towards Liet, and the ebbe north to the contrarie.

In this fareway it is deep 40, 50, and 60 fathom, in 45, and 51 fathome, you may ſee the land. In this farreway in the Sommer the firſt Herrings are caught.

How theſe lands doe lye one from the other, and from other lands.

From Cromer to Blackeney weſtnorthweſt	3 or 4 leagues
From Blackeney to Bornum through within the ſand weſt	7 leagues
From Bornum to Chappel weſtſouthweſt	2 leagues
From Chappel to Ellekenock, or the north point of Boſtondeep, the courſe is northweſt and by north	5 leagues
From thence to the north poynt of Cromer n. and n. and by weſt	7 leagues
From the north poyt of the Hommer to Flambrough-head n. n. w.	9 leagues
From the poynt of Crommer of Shield to the Teſſell eaſt	40 or 42 leagues
From the north point of the Crommer to the Teſſell eaſt and by ſouth and eaſtſoutheaſt	60 leagues
From Flambrough-head to Feley northweſt	3 leagues
From Fyley to Scharbrough northweſt	2 leagues
From Scharbrough to Whidbye northweſt and by weſt	5 leagues
From Whidbye to the Teeſe, the courſe is firſt weſtnorthweſt and afterwards weſt and by north	7 leagues
From the Teeſe to Tynmouth northnorthweſt	8 or leagues
From Whidbuye to Tinmouth, the courſe is northweſt and S. E.	16 leagues
From to Cocket Iland northnorthweſt	8 or 9 leagues
From Tynmouth to Staples north and by weſt	16 leagues
From Staples to Barwike weſtnorthweſt	3 leagues
From Barwike to S. Abbens-head northnorthweſt	5 leagues
From the Staples to S. Abbens-head northweſt	8 or 9 leagues
From S. Abbens-head to the Bas weſt	4 leagues
From the Bas to Inckieth weſt and weſt and by north	5 leagues
From S. Abbens-head to the Iland May northweſt	4 great leagues
From S. Abbens-head to Fifsnes northweſt and by north	5 great leagues
From Fifsnes to Doondle northnorthweſt	5 leagues
From Tinmouth to Schuytenes northeaſt	140 leagues
From Tinmouth to the Naze north eaſt and by eaſt eaſterlye	103 leagues
From Tinmoth to the Scawe eaſtnortheaſt	136 leagues
From Tinmouth to Holyland eaſt and by ſouth eaſterlye	106 leagues
From Fifsnes to Stone-Bay north and by eaſt	16 leagues
From Redhead to Monros northweſt	4 leagues
From Monros to Stone-bay northeaſt and by north	4 leagues
From Stone-bay to Boecknes northnortheaſt ſomwhat northerly	16 leagues
From Aberdine to Boeckenes northnortheaſt	12 leagues
From Boeckenes to Phyloort or Spyloort northnorthweſt	3 leagues
From Phyloort to the poynt of Eglyn weſt	10 leagues
From the poynt of Eglyn to the Haven off Roſſe or Luvernes weſt & by ſouth, ſomewhat ſoutherly	7 leagues
From cape de Terbate to Catenes northeaſt and by north	16 leagues
From Boeckenes to Ilhoy weſtnorthweſt	5 leagues
From Boeckenes to Catenes northweſt and by north	21 leagues
From Boeckenes to the Orcaneys north and by weſt	26 leagues
From Boeckenes to Hanglip, or the ſouth end of Hitland n. and by e.	53 leag.
From Boeckenes to Schuytenes eaſt and by north	69 leagues
From Boeckenes to the Naze eaſt ſomewhat ſoutherly	88 or 90 leagues
From Boeckenes to Boevenberghen in Iutland eaſt and by ſouth	104 leagues
From Boeckenes to Holyland ſoutheaſt and by eaſt eaſterlye,	123 leagues
From Boeckenes to the Teſſel ſoutheaſt ſoutherly	125 leagues
From Boeckenes to the Holmes before Yaermouth ſouthſoutheaſt ſomewhat eaſterlye	98 leagues
From Aberdine to the Holmes before Yaermouth ſ. e. and by ſouth	93 leagues

Heights.

Yaermouth lyeth in	52 degrees 52 minuten
The north poynt of the Hommer of Hull in	53 degrees 20 minuten
Flambrough-head lyeth in	54 degrees 5 minuten
Scharbrough in	54 degrees 12 minuten
Tynmouth or the River of Newcaſtle in	55 degrees
Tynmouth or the River of Newcaſtle lyeth in the height of	55 degrees
S. Abbens-head in Scotland in	56 degrees 12 minuten
Boeckenes lyeth in the height of	75 degrees 50 minuten
Catenes in	58 degrees 32 minuten
The greateſt or the outermoſt Iland of the Orekneys in	59 degrees 8 minuten

How theſe Lands doe ſhew themſelves at ſea.



Thus ſheweth the land betwixt Tinmouth and the hills of Huntleyfoot and Redcliffe, to the ſouthwards of the Teeſe, when you ſayle alongſt by it.



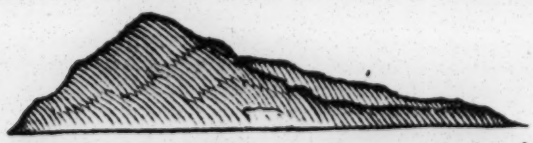
Thus ſheweth the land betwixt the Tees and Flambrough-head when you ſaile alongſt by it.



Thus ſheweth the land betwixt Tinmouth and Cocket Iland



Thus ſheweth Boeckenes when you ſaile alongſt by it.



In this form ſheweth the land Catenes, when you ſaile alongſt by it



Thus ſheweth the northeaſt poynt of Orkenes, when you ſayle alongſt by it.



Thus ſheweth the land of Scotland to the northwards Aberdyne, when you ſayle alongſt by it two leagues from the land.

The eleventh Demonſtration,

Where in are ſeth forth the Coaſt of Fayer-hill, Hitland, and the Ilands thereabout, as alſo the Ilands of Fero, and ſome Ilands behind the northweſt corner of Scotland.

Fairhill. THe Iland Fairhill lyeth from the eaſt point of the Orcanais northeaſt, and from Boeckeneſſe north and by weſt about ſeven and thirty leagues.

On the weſt ſide of Fairhill is at ſome places foule ground, but upon the ſoutheaſt ſide is good ankorground, there you may anckor every where.

Fulo. Fulo lyeth from Fairehill northweſt and by north tenne leagues, betwixt them both lyeth the ſouthermoſt poynt off Hitland, lying from Fairehill northnortheaſt 7 or 8 leagues, and from Fulo eaſt and by ſouth, foure leagues.

The ſouthweſt coaſt of Hitland, (to wete from the ſouthermoſt poynt of the northweſt poynt) lyeth northweſt and by north

Verthooninge vande Eylanden
Hebrides gelegen achter de
Noordwesthoeck van Schotlandt

Foele
Fulo

Feril

HITLANT

ILLIO

ILLIO

Lerwick

Bloemsondt

Fetlo

ØLSIO

De Eylanden van
Hitlandt Fulo en
Fayerhil

Duytsche mylen 15 in een graade

Spaensche mylen 17½ in een graade

Engelsche en Fran. mylen 20 in een graade

FERØ

De Eylanden
van Fero oste Farre.
Tot Amsterdam. By
Iacob Aertsz. Colom.

Duytsche mylen 15 in een graadt Lieues d'Allema 15 een m. deg.

Spaensche mylen 17½ in een graadt Lieues d'Espai 17½ een m. de

Engel en Fra. mylen 20 in een graadt Lieu Angl es Fra 20 een m. deg.

Sando

Swino

Bordø

Widrø

FVLO

De Byschop Farro

In dese waerk comen veel Wateren

11 JU62
MUSEUM

north seven or eight leagues. On the same southwest side, over against the Iland Fulo lyeth a Sand-bay, where men may anckor, but on the east side of this Bay, it is somewhat foule. From that northwest or west poynt off to the north end, the land of Hitland lyeth northeast and southwest seventeene or eighteene leagues.

S. Magnus. Two leagues to the northwards of the foresaid west poynt lyeth the Haven of S. Magnus, which is a broad Sound, within it is good anckor ground in sixteen or seventeen fathom depth, according as you shall be farre within the land. On the north side lyeth a high rocke, where you must run in to the southwards of. And on the south side lyeth two or three rocks, which you must leave on the starboard side, when you sayle in there.

Even to the eastwards about the S. poynt of Hitland, lieth a faire Sand-bay, where you may ankor in 12, or 13 fathom, from thẽce to Hanglip, the cours is n. e. somwhat easterly 9 or 10 lea.

Hanglip. Betwixt Hanglip and the south point lyeth an Iland, which you may sayle about on both sides, within it lyeth Hambrough Haven, or the Scottish haven which is a lade place for the Hamburgers and Scots. This Haven is also called Bremer Haven. There lyeth also a high steepe poynt to the southwards of Hanglip, to the southwards of it men doe runne into Broad sound, the chiefest Haven of all Hitland, which is deepe and hath cleane ground, there men doe lye landlockt for all winds.

From the Broad Sound lieth a Sound in alongst to the n. wards, through the land, which cometh out againe into the Sound to the northwards, and so maketh an Iland of the land whereupon the high hil Hanglip lieth. When as you wil saile in there from the northwards, that is to the n. wards of Hanglip, you must run in nearest by the south shoare, and edge to it betimes. In this channell betwixt both lands lye 2 Ilands or rocks, the greatest lyeth nearest the north shoare, & the smallest nearest the south shoare, betwixt them both lyeth also a suncken rocke, which at low water is uncovered, and at high water you may know it by the breaking upon it. When as you will sayle in here, you must leave the foresayd greatest Rocke, with the suncken rock, on the starboard side, and the smallest rock on the larboard side, there is upon the showldest three fathom and a halfe water.

Within this haven lye also two havens at the north point, which lye into the land, where is good lying.

When as you wil saile from this foresaid havẽ through within unto the Broad-sound, you shall meet, scarce halfe wayes with a rock, from which lyeth off a riffe towards the west shoare thwart of it you must runne close alongst by the west shoare, for to avoid that riffe.

To the northwards of Hanglip, the land of Hitland lyeth north, and n. & by east, & northnortheast, at last north, and at some places, you may sayle in through Hitland, especially to the northwards of Hanglip, where a faire broad Sound lieth northwest through, there is good anckor ground to finde at some places, for these that are there acquainted. From Hanglip to the northeast point of Hitland, the course is n. n. e ten leagues, there lie some outrocks called the Outschares. From thence alongst to the n. point of Hitland, the course is n. about 4. leag.

Outscares.

Bloomsound. A litle about east point goeth in a faire haven, called Bloomsound, lying in s. w. On the west side lieth a long rock, you must saile into the eastwards of it, & anckor a little within the haven, it is there within all cleane sand ground, and good lying Bloomsound lyeth in first (as hath been said) southsouthwest afterwards south and south and by east, on both sides is good anckor ground, there you may saile altogether through, and come out againe through Ielle-sound into sea, about the Iland Fero.

Names off the Ilands of Fero. The greatest and chiefest Ilands of Fero are 12 in number, as Suydro, Sando, Moggenes, Wage, Stromo, Oistro, Calso, Cuno, Bordo, Wydro, Swyno and Fulo.

The little Ilands of Fero are ten, as Littledymen, Stoerdymen, Schuyso, Dalsfles, Hesdẽ, Trallo, Colster, Moggenesholm, the Monck, and the Bishop. Besides these there are yet some rocks and little Ilands, to seven or eight in number.

Suydro. The southermost great Iland called Suydro, lieth most S.E. and northwest, about seven or eight leagues. At the S.E. end of this Iland lyeth a high rock, called the Monck, or Sambie, after the name of the first or southermost haven in Suydro. Betwixt the Monck and the southeast end of the Iland Suydro, is a race or Well, which men must avoid especially with spring tides.

Monck Sambay. Upon the west side of the Iland Suydro are no havens for to save any shippes, but it is altogether high steepe land. On the North side are manie havens, where men may sayle into and save ships, as Sommersound or Hest, Hofwyke. Vrobie, Quaelbie or Rane, all broad sounds or havens, a countrie man or Pilot can bring you in there every where to your desire.

Moggenes-holm. From the Northwest end Suydro to Moggensholme, the westermost and outermost Iland of Fero, the course is N. W. and by north, and northnorthwest about eigt or nine leagues.

Moghanes wage. At the east end of Moggenesholme lieth Moggenes, to the eastwards of it lieth the Iland Waghe, and to the eastwards of Wage goeth in a faire Sound from the southwards off from the Iland Sando about Hesten and the Iland Colster, for you may run in about these Ilands on both sides, & leave the great Iland Stromo & the east side, and so come into Wage. In the middest of the sound of Wage, goeth up a haven to the eastwards into the great Iland Stromo, there in you may anckor in 10, or 12 fathom, but the Sound is at least 20 fathom deep.

Moggenes and the northeast end of Fero lie eastnortheast or a little more northerlye, and westsouthwest about 15 leagues asunder. Betwixt them both lye tenne Ilands, and betwixt each Iland, is a faire broade and deep Sound whereof the fourth off from Moggenes is called Somsound. All these Sounds lye most northnorthwest and southsoutheast through the land, and upon all these Ilands stand Churches, except upon Ostra, which never the lesse is a great Iland.

Somsound.

From the southeast end of Suydro to Schalhead, or the southeast end of the Iland Sando, the course is north and by west about five leagues. Betwixt Suydro and Sando lye the little Ilands, little Dymen, Stoer Dymen, Schavo and Dalsfles.

Schalhead. Little Dymen. Stoer Dymen.

From Schalhead untill within the Iland Mulso (lying before Stromo) the course is n. and by west 4 leagues, there you may every where anckor, where you will in twintie, thirtie or fortie fathom. If any man comming in out of the sea, desireth to see a good road or haven under the Ilands of Fero, he shal keepe that middlemost great Iland Stromo northwest and northwest and by west from him, and then hee shall see upon the middest of the Iland Stromo a high steepe hill called Schellinck, which he must sayle right in with, and so he shall meete with that foresayd Iland Mulso, a low Iland, which you may sayle about on both sides, but is best for to run in there at the south end, under this Iland is all over good anckor ground. Right over against this Iland, on the great Iland, lyeth Torshaven, the chiefest haven of Fero, where all the trade of Merchandize is.

Torshaven

From Torshaven or the Iland Mulso to the n. e. end of Fero the course is n. e. and n. e. and by east about 12 or 13 leagues, betwixt them both lye 7 Ilands, & betwixt each Iland (as hath been sayd) goeth a broad Sound thorow the land, lying through about N. W., N. W. and by north, and northnorthwest. The north end of Fero is about foure leagues broad, and lyeth n. w. and southeast, and is called Fulo, thwart of it lieth the Bishop.

Fulo.

He that desired to sayle of from Mulso into Somsound, let hem goe on n e. & by n. 3 leagues, unto the point of Bordenes, then up n. w. off from Bordenes, & then he shal espie a Church upon the Iland Calso, which he must leave on the starboard side, and goe in along w. n. w. untill he come into the Bight of the Iland Oftro, and anckor there in 17 or eighteene fathom.

The Bishop.

These Ilands of Fero lye in a triangle, it is from the southeast end of Suydro to Fulo, or the north end of Fero northnortheast and southsouthwest 21 leagues asunder.

From Schotland westwards and to the northwards of Ireland, lye many Ilands, whereof we shall here describe some, with so much perfectnes, as thereof is yet knowne.

Names off the Ilands. The names of the principall Ilands lying there are these: Areu, Ila, Jona, Mulla, Bragedull, Hun, Lewis, S. Patricius, S. Maria, S. Colane, S. Petous, Epth, and S. Kilda, these are the greatest. There are yet some small Ilands: as Rona, Ghent, Trauta, Fladde, Grand Melul, Petit Melul, Stalpan, Cannay, Rum, Egghe, Mule, Cutte, Carndenbrough, Gronsay, S. Karbo, Lismont, Swynoy, Machare, Gegay, Caray, and Navarsay. All these Ilands doe lye and belong under Schotland, and are those which by the Cosmographers are called Insulæ Hebrides.

Barre or Rona. The Iland Barre or Rona is the northermost Iland lying behinde Scotland, and lyeth from Fulo about westsouthwest 37 or 38 leagues, it lyeth by two other little Ilands about a greate league one from the other.

The Ilands of Lewis lye from Rona southwest distant 16, or 17 leagues, and from the north end of Lewis to S. Kilda, it is southwest and by west, 16 leagues.

On the east side of S. Kilda is a good roade for a west and n. west winde. This Iland lyeth by the other little Ilands, whereof the two are not very great, upon that which lyeth to the westwards, you may see some houses stand, and those two little Ilands lye tenne leagues to the westwards, of the great Iland of Lewis. Upon the coast of Lewis lye also two rowes of great rocks, like as if they where litle Ilands, lying one from the other south and north somewhat easterlye about seven or 8 leagues.

The southermost lye by three little Ilands, but the northermost lye by eight small little Ilands or rocks.

The Iland of Lewis is devided into many parts, the which men may saile throug at many & divers places, Lewis with the Iland

Iland belonging to it lye ſ.ſ.w. and ſ. & by w. about 29 leagues.

But on the eaſt ſide goeth a broade Sound through of five or ſix leagues. Men ſayl in cloſe by the Iland of Lewis, about ſouthſouthweſt untill paſt the Iland Cheut.

From thence the Sound lyeth through betwixt the great Iland Bragadull and Levis ſouth and ſouth and by weſt towards the weſtend of Lewis, called the Ephts, then you muſt leave Mulla & Ila, with divers many other Ilands on the larboard ſide.

Jona, Ila, Mulla and Bragadul are foure of the greateſt Ilands, which are lying on the weſt coaſt of Scotland, and lye cloſe by the mayn land, but there are many havens and Sounds, ſo that there you may ſayle in and about them every where.

At the northweſt point of Ireland lye alſo ſome Ilands, which you may ſayle through and round about them all.

Betwixt Rona and Orkaneys lye alſo ſome Ilands which alſo you may ſayle through betwixt and round about.

He that falleth with theſe Ilands muſt be very carefull and circumſect, for the moſt part of them are inhabited by wild and ſavage people.

In Lewis and the Ilands there about a ſouthweſt and northeaſt moone maketh the higheſt water, & likewiſe alſo without the north poynt of Scotland.

Of the Tydes and courſes of the ſtreames.

In [illegible]land within the havens and Sounds a ſ. ſouthweſt, and northnortheaſt moon maketh full ſea. The floud runneth there to the eaſtwards, and the ebbe to the weſtwards, eſpecially at the ſouth end and north end of Hitland, and ſo fall thwaite through the Sounds and havens.

In the Ilands of Fero a north and ſouth moon maketh the higheſt water.

Under the Ilands of Fero goe very harde tydes, with great turnings. the floud commeth there out of the weſt and weſtnorthweſt, and the ebbe out of the eaſt and eaſtſoutheaſt and fall ſo alongſt through the Ilands, there you muſt reckon your tides thereafter, when you will ſayle from the one Iland to the other, there are 2 wels or Maelſtreames, the one at the ſouth end of Suydro, and the other a league within Schalhead at Quaelnes.

Although the tides doe run ſo ſtrong through theſe Ilands yet nevertheles it floweth not there foure foot up and downe.

How theſe lands doe lye one from the other, and from other lands.

From Fairehill to the northeaſt poynt of Orcaneys ſouthweſt 9 or 10 leagues
From Fairehill to the ſouth end of Hitlandt ſouthſouthweſt and ſouth and by weſt 7 or 8 leagues
From the ſouth end of Hitland to the Iland Rona weſtſouthweſt 46 leagues
From the north end of Hitland to the rocks of Rocol w.ſ.w. 127 or 128 leag.
From the ſouth end of Hitland to Fero w.n.w. and n.w. and by weſt 61 leag.
From the n. end of Hitland to the ſ. end of Fero w. and w. and by n. 58 leag.
From Hitland to the eaſt point of Iſland, the courſe is northweſt, and by weſt about 130 leagues
From the north end of Hitland too Gryp northeaſt and by eaſt 125 leagues
From Hitland to Stadt eaſtnortheaſt 69 leagues
From Fero to Rona, the courſe is ſouth and by eaſt 45 or 46 leagues
From the ſouth end of Fero to Rokol ſouthweſt weſterlye 85 leagues
From Rona to Lewis, the courſe is ſouthweſt 16 leagues
From the north end of Lewis to S. Kilda ſouthweſt 16 leagues
From the ſouth end of Lewis to the northweſt point of Ireland, the courſe is ſouthſouthweſt about 17 leagues
From S. Kilda to the north end of Hitland n. e. and by eaſt 39 leagues

Of the Heights of theſe lands.

The ſouth end of Hitland lyeth in	59 degrees 48 minuten
The north end of Hitland lyeth in	61 degrees 45 minuten
The ſouth end of Fero lyeth in	61 degrees 15 minuten
The north end in	62 degrees 20 minuten
The Ilands of Rona lyeth in	58 degrees 46 miſluten
The north end of Lewis lyeth in	58 degrees 18 minuten
The Rock Rokol lyeth in	58 degrees 20 minuten
The northweſt poynt of Scotland lyeth in	58 degrees 30 minuten

How theſe Lands doe ſhew themſelves at ſea.



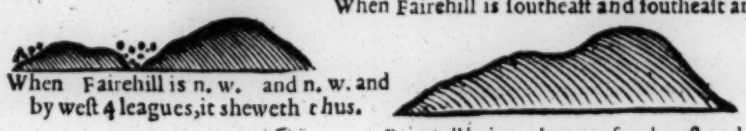
When Fairehill is weſt and by ſouth three or four leagues from you, it ſheweth thus.



When Fairehill is weſt from you, ſee Hitland northweſt from you, it ſheweth thus.



When Fairehill is ſoutheaſt and ſoutheaſt and by eaſt three or four leagues from you, it ſheweth thus.



When Fairehill is n. w. and n. w. and by weſt 4 leagues, it ſheweth thus.

Fairehill being 5 leagues ſouthweſt and by weſt from you ſheweth thus



When Fulo is northweſt from you ſo far, that you may even ſee it out of the top, it ſheweth thus.



When the ſoutheaſt end of Hitland is weſtnorthweſt from you, then ſheweth the land as in theſe three figures the AA BB one to the other.



Thus ſheweth Hitland, when it lyeth northweſt and by weſt about four leagues from you.

Bremerhaven — Point of Broadſound. — Hanglip.



In this forme ſheweth Hitland, betwixt Hanglip and Hamburger-haven.



Five leagues to the n. wards of Hanglip, the land ſheweth thus, being about a league off from it, Hitland lyeth in there with a great bight, with many Ilands.



Thus ſheweth Hanglip, when it is n. w. from you eight leagues



When as the n. end of Hitland is ſ. e. and by eaſt from you, then it riſeth thus:



When S. Kilduyn is S. W. about five leagues from you, it ſheweth thus



When the Land Lewis lyeth eaſt from you then it riſeth thus, and then you are without S. Kilda.



This Iland lieth alſo upon the coaſt of Lewis.



S. Kilda 6 leagues ſ.w. from you, it ſheweth thus.



S. Kilda n. e. from you, 4 leagues, it ſheweth thus.



This Iland lyeth weſtſouthweſt from Scotlant.



S. Kilda ſouthweſt and by weſt 4 leagues from you, it ſheweth thus.



Fulo 4 leagues from you, it ſheweth thus.



Thus ſheweth the Iland Barre or Rona, when it is 4 leagues ſ. ſ. e. from you.

The ſouth poynt of Fero weſtnorthweſt from you, 5 leagues it ſheweth thus.



This land lyeth on the northweſt poynt of Scolandt towards Locherme.



The ſouth poynt Fero northweſt 6 leagues from you, ſheweth thus.

The

The Second Booke,

OF THE NEW,

FYRIE COLOMNE,

Of the EASTERN NAVIGATION.

THE SECOND PART

wherein the Descriptiõ,

Of the

Zea-Coasts of Norvvay Finmarck and Laplandt: Unto the whole White Zea, from Dronten to Nova Zembla.

Which is seth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very serving-able for all Mariners and Pilots.



Printed at Amsterdam,

By Iacob Columne, on the Water, in the Firie Columne.

Anno M. DC. XLIX.

Finmarcken

Wardhus

SPITS-

Noord Caap

Tanebay

Kola

Duytsche mylen 15 voor een graadt.

Engels. en Fransze mylen 20 voor een graadt.

Tot Amsterdam.
By Iacob Aertz Colom
In de Vierge Colom
opt Water.

't Landt
Spitsbergen
Nauwelyckx gevonde

Strande

Strande

Zandbay

Recht van Davis

De 3 Elygen

Blinde

Blinde

IAN
MAYEN
EYLANDT

Duitsche mylen 15 in een graadt

Spaensche mylen 17½ in een graadt

Eng. en Fr. mylen 20 in een graadt

Les Costes Maritimes de Norwegue et Finmarcke entre Dronten et le Nort Caep

FINMARCKEN

Nord d Caep

Samen

De Custen Van
Noorwegen Finmar-
ken tusschen Dronten
en de Noort Caap
Door I. A. Colom.

Duytsche mylen 15 in een graadt
Spaensche mylen 17½ in een graade
Eng. en Fr. mylen 20 in een graadt

Dronten

Bieren Eylandt

Noorwegen

Schonenland

Helligelandt

Ysgenoch

Ruslt

Ladoga

Westrol

Lassel

Duytsche mylen 15 in een graadt Lieues d'Allemaigne 15 en un degre
Spaensche mylen 17½ in een graade Lieues d'Espaigne 17½ en un degre
Eng. en Fr. mylen 20 in een graadt Lieues Angl. et Franc. 20 en un degre

MUSEUM

THE SECOND BOOKE,

Of the

EASTHERN and NORTHERN NAVIGATION

Containg

The deſcription of the ſeacoaſts of Norway, Finmark, Lapland, and the whole White Sea.

The firſt Demonſtration,

wherein are ſet forth the coaſtes of Norway, from Dronten to the North Cape; as alſo John Mayes Iland, & the New-found-land of Spitſbergh.

FRom the Iland Gryp to the Nomen-dals Ilands, the courſe is northeaſt, eighteene leagues, but from Gryp to the Iland Ruſt, north and north and by eaſt fortie foure leagues, betwixt them lyeth (beſides the Nomendals Ilands) alſo the Ilands Holyland, and Traenoch. Traenoch and Ruſt lye thirteen leagues aſunder. From Ruſt to Wero, the courſe is northeaſt and by north nine leagues, but to Loffoert northnortheaſt three and thirtie leagues. Betwixt Wero and Loffoert lieth the Maelſtrame, where you may ſaile through, but at ſtill water. By the weſt point of Loeffoert you may runne in, and make roade under it. And alſo you may run through from thence within betwixt the Ilands and the mayn land, all along unto the north cape.

Betwixt the Ilands Weſterholl, Sanien and Tromſound, you may alſo runne in at divers places, and make roade. Thwart of theſe Iland lye here, and there in ſome places ſuncken rockes and foule grounds, a great league and more without the land. He that ſaileth alongſt this coaſt, may be mindfull there of.

From the Iland Tromſound to Surroy it is eaſt northeaſt 15 or 16 leagues to the eaſtwards of the Iland Trom-ſound goeth in the Trom-ſound betwixt the Iland Fogelden and Skyrfeu, as you ſaile in there you leave the Ilands Loppen, and Loppen-kalf lying on the larboard ſide without the other Ilands, within it are divers Ilands bayes and ſounds, where you may ſaile in, and ſeeke road, as Oxéfioert, Biurfioert, and other more.

Betwixt Loppen and Suroy men doe ſaile through Suyer-ſound and Stiernorſound into the river of Aſrenbotten, & then betwixt them they leave on the ſtarboard ſide Niusfioerd, Oxe-fioerd and Langefioerd. On the larboard ſide about by the weſt point of Suroy, on the land of Suroy, lieth a haven, where by is alſo a Fiſher village, both called Haeſwyke, Suroy is about ten leagues long, and lyeth on the offſide, eaſtnortheaſt.

Nine or ten leagues to the eaſtwards of the Iland Trom-ſound, about three leagues without the land lieth a ſhowld of rockes a little under water. Iohn Huygen of Linſchoten in this ſecond voyage to Nova Zembla, in the yeare 1595 ſailed with his ſhippe upon it in faire weather and ſmoot water, that the ſheating of this ſtemme was beaten of to ſhips; but after ſome beating the ſhippe turned of with the ſtrong current. It is to be throug that there lye more then men can ſee, or as yet are diſ-covered.

About five leagues eaſt and by north from the eaſt end of Suroy, lieth the Iland Ingen, betwixte them both lye alſo Reef-holme and Shipholme little Ilands which you may ſaile about on both ſides, untill under Ingen or Suroy.

When as you come in betwixt Suroy and Ingen, there lieth thwart off from Suroy towards the other land, a good haven, I calle Hamerfeeſt. A little further in lye two high little Ilands, and over againſt them road called Slechtnes. Betweene Ha-merfeeſt and Slechtenes, before that you get Slechtenes, lieth a bay on the land of Suroy, where is a good roade in 25 or 30 fathom cloſe by the ſhoare. A little paſt theſe little Ilands on the land of Suroy, over againſt the river of Alten, is a good road called Goeſhop a favr ſandbay.

Hamer-feeſt.

Slechte-nes.

Goeshop.

Between Ingen and the North-Cape, or the Iland Maggereu lieth Helmſhuy, an Iland which you may ſaile round about, having on the northweſt ſide a bay, called Ackefioerd, where men may make road for ſoutherly and eaſterly winds, on the ſouth-eaſt ſide is a bay called Knaarwyke, where men may make road, and lye ſheltred for weſterly and northerly winds.

Holmes buy.

Akefioerd.

Knaar-wyke.

The North-Cape is the northermoſt point of the Iland Maggereu, a little to the weſtwards of it lye the little Ilands of Stappen.

Northeap

Stappen.

On the ſouthſide of Maggereu even about the eaſt point, lieth Keelwyke a good haven. On the ſame S. E. ſide, by the ſouthermoſt point of Maggereu, lieth a little Iland called Al-tenſoleu, the Sound betwixt that little Iland, and the land of Maggereu is called Maggereu-ſound, there is good roade, and ſhelter for almoſt all winds: Men may runne in through Suyer-ſound to the weſtwards of Suroy within Suroy, Ingen, Helm-ſhuy, and other more Ilands to the ſouthwards of them, a long through divers channels to the ſouthwards of Maggereu, and come out againe into ſea betwixt the Northcape & Northkyn.

Maggereu-ſound.

From the North-cape weſtwards the coaſt lieth alongſt the Ilands weſt & by ſouth about 37 leagues, and then from thence weſtwards, it falleth away more ſoutherly.

Of the Tydes and Courſes of the ſtreames, about theſe foreſayd places

On theſe coaſtes a ſouthſouthweſt and northnortheaſt moon maketh full ſea. The ſoude cometh there out off the northweſt, and falleth alongſt Finmark to-wards the North-cape.

Between Suroye, and the river of Alten a ſouthweſt and by weſt and north-eaſt and by eaſt moone maketh high water.

At the North-Cape a ſouthſouthweſt and northnortheaſt moon.

To the weſtwards of the North-cape the ſtreames come out of the north-weſt and weſtnorthweſt, and fall alongſt Finmarck towards the North-cape.

Courſes and Diſtances.

From Ruſt the Loffoert northnortheaſt	——	33 leagues
From Loffoert to Sanien northeaſt	——	36 leagues
From Sanien to Suyro northeaſt and by eaſt	——	43 leagues.
From the Iland Tromſound to the weſt end of Suroy	E.N.E.	13 or 14 leagues
From the eaſt end of Suroy to Ingen eaſt and by north	——	7 leagues
From Helmshuy to the North-cape eaſt and by north	——	5 leagues
From the Northcape to North-kyne eaſt and by ſouth		12 or 13 league.

Heights.

The Maelſtream lyeth in about	—— ——	68 degrees
The Iland Sanien in	—— ——	70 degrees
The North cape lyeth in the hight of	——	71 degrees 30 minuten

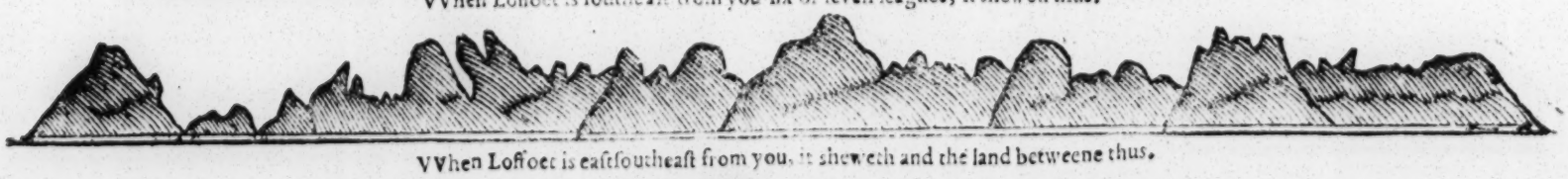
How theſe Lands doe ſhew themſelves at ſea.



VVhen the eaſt end of Loffoet is ſoutheaſt and by eaſt from you, it ſhewed thus, with the land to the weſtwards.



VVhen Loffoet is ſoutheaſt from you ſix or ſeven leagues, it ſhewed thus.



VVhen Loffoet is eaſtſoutheaſt from you, it ſheweth and the land betweene thus.



This belonget to the Former.

MUSEUM

THE SECOND BOOKE,

Of the

EASTHERN and NORTHERN NAVIGATION

Containg

The description of the seacoasts of Norway, Finmark, Lapland, and the whole White Sea.

The first Demonstration,

Wherein are set forth the coastes of Norway, from Dronten to the North Cape; as also John Mayes Iland, & the New-found-land of Spitsburgh.

FRom the Iland Gryp to the Nomen-dals Ilands, the course is northeast, eighteene leagues, but from Gryp to the Iland Rust, north and north and by east sixtie foure leagues, betwixt them ly (besides the Nomendals Ilands) also the Ilands Holyland, and Traenoch. Traenoch and Rust lye thirteen leagues asunder. From Rust to Wero, the course is northeast and by north nine leagues, but to Lofsoert north northeast three and thirtie leagues. Betwixt Wero and Lofsoert lieth the Maelstrame, where you may saile through, but at still water. By the west point of Loeffoert you may runne in, and make roade under it. And also you may run through from thence within betwixt the Ilands and the mayn land, all along unto the north cape.

Betwixt the Ilands Westerholl, Sanien and Tromsound, you may also runne in at divers places, and make roade. Thwart of these Iland lye here and there in some places suncken rockes and foule grounds, a great league and more without the land. He that saileth alongst this coast, may be mindfull there of.

From the Iland Tromsound to Surroy it is east northeast 15 or 16 leagues to the eastwards of the Iland Trom-sound goeth in the Trom-sound betwixt the Iland Fogelden and Skyrsen, as you saile in there you leave the Ilands Loppen, and Loppen-kalf lying on the larboard side without the other Ilands, within it are divers Ilands bayes and sounds, where you may saile in, and seeke road, as Oxefioert, Biursioert, and other more.

Betwixt Loppen and Suroy men doe saile through Suyer-sound and Stiernorsound into the river of Alrenbotten, & then betwixt them they leave on the starboard side Niusfioerd, Oxe-fioerd and Langefioerd. On the larboard side about by the west point of Suroy, on the land of Suroy, lieth a haven, where by is also a Fisher village, both called Haeswyke, Suroy is about ten leagues long, and lyeth on the offside, east northeast.

Nine or ten leagues to the eastwards of the Iland Trom-sound, about three leagues without the land lieth a showld of rockes a little under water. Iohn Huygen of Linschoten in this second voyage to Nova Zembla, in the yeare 1595 sailed with his shippe upon it in faire weather and smoot water, that the sheating of this stemme was beaten of to ships; but after some beating the shippe turned of with the strong current. It is to be throug that there lye more then men can see, or as yet are dis-covered.

About five leagues east and by north from the east end of Suroy, lieth the Iland Ingen, betwixte them both lye also Reef-holme and Shipholme little Ilands which you may saile about on both sides, untill under Ingen or Suroy.

When as you come in betwixt Suroy and Ingen, there lieth thwart off from Suroy towards the other land, a good haven, called Hamerfeest. A little further in lye two high little Ilands, and over against them road called Slechtenes. Betweene Ha-merfeest and Slechtenes, before that you get Slechtenes, lieth a bay on the land of Suroy, where is a good roade in 25 or 30 fathom close by the shoare. A little past these little Ilands on the land of Suroy, over against the river of Alten, is a good road called Goeshop a favr sandbay.

Hamer-feest.

Slechte-nes.

Goeshop.

Between Ingen and the North-Cape, or the Iland Maggereu lieth Helmshuy, an Iland which you may saile round about, having on the northwest side a bay, called Ackefioerd, where men may make road for southerly and easterly winds, on the south-east side is a bay called Knaarwyke, where men may make road, and lye sheltred for westerly and northerly winds.

Holmes buy.

Akefioerd.

Knaar-wyke.

The North-Cape is the northermost point of the Iland Maggereu, a little to the westwards of it lye the little Ilands of Stappen.

North cape.

Stappen.

On the southside of Maggereu even about the east point, lieth Keelwyke a good haven. On the same S. E. side, by the southermost point of Maggereu, lieth a little Iland called Al-tensoleu, the Sound betwixt that little Iland, and the land of Maggereu is called Maggereu-sound, there is good roade, and shelter for almost all winds: Men may runne in through Suyer-sound to the westwards of Suroy within Suroy, Ingen, Helm-shuy, and other more Ilands to the southwards of them, a long through divers channels to the southwards of Maggereu, and come out againe into sea betwixt the Northcape & Northkyn.

Maggereu-sound.

From the North-cape westwards the coast lieth alongst the Ilands west & by south about 37 leagues, and then from thence westwards, it falleth away more southerly.

Of the Tydes and Courses of the streames, about these foresayd places

On these coastes a southsouthwest and northnortheast moon maketh full sea. The floude cometh there out off the northwest, and falleth alongst Finmark towards the North-cape.

Between Suroye, and the river of Alten a southwest and by west and north-east and by east moone maketh high water.

At the North-Cape a southsouthwest and northnortheast moon.

To the westwards of the North-cape the streames come out of the north-west and westnorthwest, and fall alongst Finmarck towards the North-cape.

Courses and Distances.

From Rust the Lofoert northnortheast	33 leagues
From Loffoot to Sanien northeast	36 leagues
From Sanien to Suyro northeast and by east	43 leagues.
From the Iland Tromsound to the west end of Suroy E.N.E.	13 or 14 leagues
From the east end of Suroy to Ingen east and by north	7 leagues
From Helmshuy to the North-cape east and by north	5 leagues
From the Northcape to North-kyne east and by south	12 or 13 league.

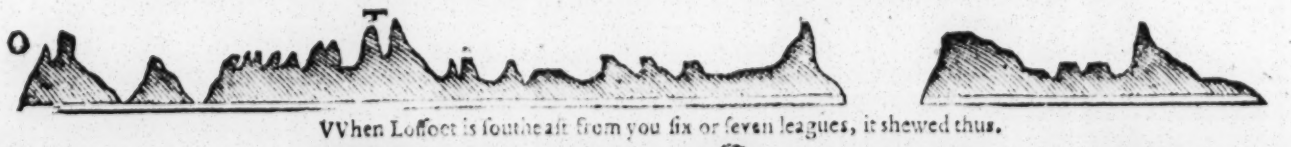
Heights.

The Maelstream lyeth in about	68 degrees
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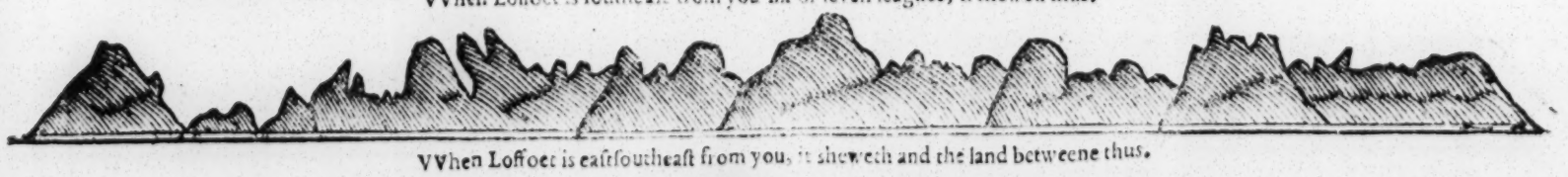
How these Lands doe shew themselves at sea.



VVhen the east end of Loffoet is southeast and by east from you, it shewed thus, with the land to the westwards.



VVhen Loffoet is southeast from you six or seven leagues, it shewed thus.



VVhen Loffoet is eastsoutheast from you, it sheweth and the land betweene thus.



This belonget to the Former.

When this ſpoynt with the * is weſtſouthweſt from you it ſheweth thus.

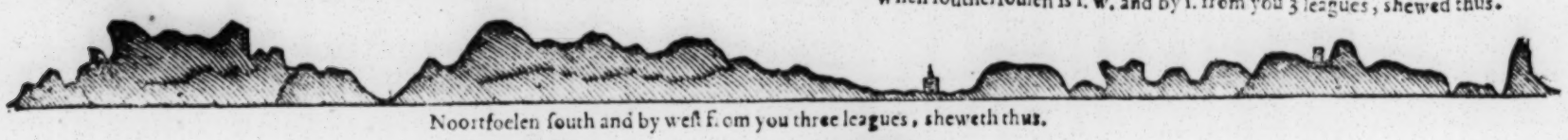


Noorthfoelen with the land to the weſtwards sheweth thus, when the poynt * is ſouthweſtard by weſt from you.



The land to weſtwards Foelen sheweth thus, when it is ſouthweſt and by ſouth from you.

When ſouther foulen is ſ. w. and by ſ. from you 3 leagues, shewed thus.



Noortfoelen ſouth and by weſt from you three leagues, sheweth thus.



The eaſt end of Weſterholl sheweth thus, when as you ſayle alongſt by it, about ſeven leagues off from it.



Theſe two figures belong at the croſſes one to the other.



Thus sheweth the Iland of anen, when the two high hils upon the eaſt end are ſoutheaſt and by ſouth, and the poynt, with the clift ſouth and by weſt from you four leagues. When as the two foreſayd high Hils upon the eaſt end are ſouth from you, then they are right one in the other.

Shipholm

Iland without Suroy.



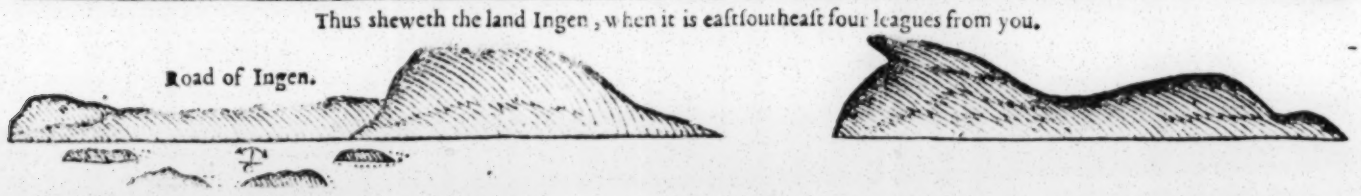
Thus sheweth Suroy, as you ſayle alongſt by it five leagues off.

VVhen as Shipholm is ſoutheaſt and the Iland without Suroy is about 4 leagues from you, then they shew themſelves thus.



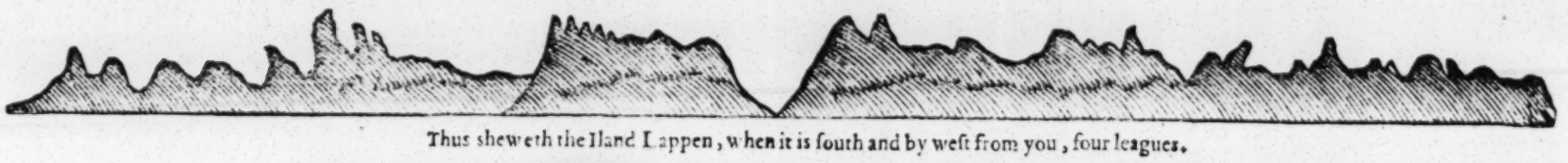
Thus sheweth the land Ingen, when it is eaſtſoutheaſt four leagues from you.

Road of Ingen.



Thus sheweth Ingen, when this Hill is one league ſouth and by eaſt from you.

This Hill lying upon the Iland Lappen, you may ſee over Suroy as you ſayle alongſt by Suroy from the north end to the ſouth end.



Thus sheweth the Iland Lappen, when it is ſouth and by weſt from you, four leagues.



Lappen ſouth and by eaſt from you, four leagues sheweth thus.



Lappen sheweth thus ſouthweſt and by ſouth from you, four leagues.



VVhen as Ingen lyeth ſouth thwart from you about four leagues, it sheweth thus, and then Shipholme lyeth ſouth and by weſt from you.

Long-Hill



Thus sheweth Ingen, when this Longh-Hill is ſouthweſt and by weſt from you.



VVhen Helmſey is ſouth or ſomewhat more weſterley about three leagues from you, it sheweth thus.



VVhen as Helmſey is ſouth and ſouth and by weſt five leagues from you, it sheweth thus.



Helmſey being ſouthweſt ſeven leagues from you, sheweth thus.

Southſouthweſt.



Thus sheweth Helmſey being foure leagues off from it, when the flat hill is ſouthſouthweſt from you.



In thus from sheweth the Iland Stappen, when it lyeth ſouthſouthweſt four or five leagues from you.



Thus sheweth Stappen, when it is 5 or 6 leagues ſ. w. from you.



The eaſt end of Stappen sheweth thus, when you ſayle alongſt by it.

North Cape ſouth and by eaſt.

The Mother with the Daughters ſoutheaſt and by ſouth.



Thus sheweth the North Cape ſayling alongſt by it, the poynt being from you as above is shewed.

South

De Custen van Noorwegen. En Lapslandt. Tusschen Noordkyn en Kildùyn.

Iacob Aertsz. Colom.

Duytsche mylen 15 in een graadt — Lieues d'Allemaigne 15 en un degre

Spaensche mylen 17½ in een graadt — Lieues d'Espaigne 17½ en un degre

Engel en Fran. mylen 20 in een graadt — Lieues Angl. et Franc. 20 en un degre

De RIVIER VAN KOLA

Een Duytsche mijl
ou Lieu d'Allemaigne

Kola
Huijs
Robben Clip
Clockbergh
Witte steen
Dris Comingen
Dese Clip leyt met
breeck water boven

LAPLANDT

Het Eylandt Kilduyn met de Reede
naer't leven ontworpen leggende op de
hoochte van 69 graaden 40 minuten
ou trois d'Allemaigne
Een Duytsche mijl

Dese Eylanden leyt
Noort en Oost

Dese Eylanden leyt
Noort en Oost

Dese Eylanden leyt
Noort en Oost

Noorwegen

Het Eylandt Waerdhus

Kynnaes

Nort

Camp

Siena

Sletnes

Dumsk

Lapmarken

Swartsens

Varanger

Kolguef

Kilduin

Wardhus

Islandt

Pechora

Kondinos

Ruiskoi

Les Costes Marines entre Noordkyn et Swetenoes.
a Amstel. par Iaques Colom.

De Custen van Lapland tusschen Kilduin en Swetenoes
Luct Aertsz Colom

Sydenik Dachia

Finden Pa

Rinde

Gabriel

Swetia

Nort

Erslandt

Norwegia Vetus

Engl. Kildruin

Terreberi

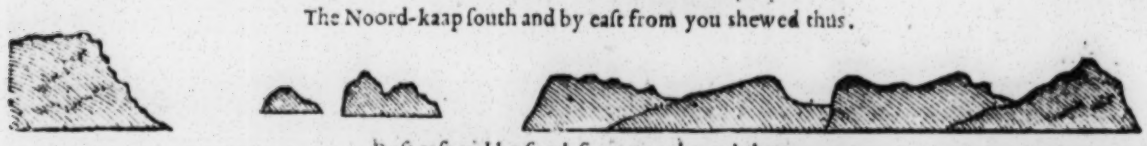
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South and by eaſt.

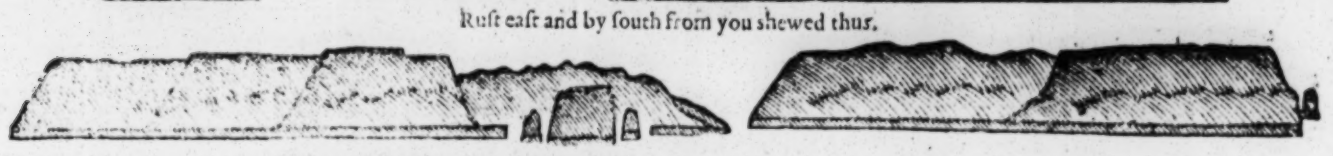


Noord-kaap.

The Noord-kaap ſouth and by eaſt from you shewed thus.



Ruſt eaſt and by ſouth from you shewed thus.



VVhen the Mother with the Daughters eaſtſoutheaſt from you, is, the land sheweth thus.



VVhen the North-Cape is ſoutheaſt, and the Mother with the Daughters ſouthſoutheaſt from you, then they shew themſelves thus.



Thus sheweth the North-Cape ſailing alongſt by it about three leagues from land, when you are cloſe by the land, you may ſee the Mother alongſt above the land.

Northkyn.

Mother with the Daughters.



Thus sheweth the North-Cape, when as the Mother with the Daughters are ſouthſouthweſt foure leagues from you, then the North-Kyn lyeth ſouthſoutheaſt from you, as is here above demonſtrated.

Southweſt and by ſouth

Southweſt

ſouthweſt and by weſt.



Thus sheweth the North-Cape the poynt being from you, as ſtandeth there abouts VVritten and then you may ſee the Mother from the harches appeare even above water.



Thus sheweth the North-Cape, when it is weſt and by north from you, and that you are three or foure leagues without Northkyn.

ſouthſoutheaſt.



Thus sheweth Northkyn being ſouthſoutheaſt eight or nine leagues from you, then lyeth the north cape nine or tenne leagues ſouthweſt from you, and then between both you may ſee yet more land in the ſouthſouthweſt.

The Second Demonſtration,

In which, Are sheweth the Seacoaſtes betweene the North Cape and Swetenoes.

Northkyn.

EAſt and by ſouth aboute thirteene leagues from the north-cape lieth north-Kyne. From North Kyne to Tannebay it is eaſtſoutheaſt tenne leagues, between both, it is all a cleane coaſte, without Rockes or foule grounds, a high ſteepe craggie land, without anie ſtrand.

When as you come ſailing alongſt paſt North-Kyne, towards Tannebaye, you ſhal meete firſt with the pointe of Slechtnes, a plaine point lying out, verie good to be known: & then Omega a Fiſher village, ſtanding on the ſea ſide, even there to the eaſtwards of it goeth in the Tannebay, which is a great deepe River, which lieth in firſt ſouth, & afterwardes ſ. w. farre within the land, and doth devide it ſelfe into 2 parts, at the mouth of the River, it is at leaſt 2 leagues or more broad, and all over verie deepe. He that is bound into the Tannebay, muſt run in alongſt by the w. ſhoar, becauſe he muſt lie by weſt ſhoar, on the e. ſide is no roade or place, where men may ankor.

Tannebay.

On the foreſaide weſt ſide are manie pointes and bayes to ſee to, as if there where roades, but you muſt ſaile paſt them all ſo long, untill that you ſee on the ſame weſt ſhoare a reunde hil, whereupon ſtandeth a Warder, a little paſt that, ſtand ſome Fiſhermens houſes, upon a lowe hommock, thwarte of theſe houſes runneth off from the land a lowe flatte pointe, you muſt run in behinde that point, and anckor before thoſe houſes, which an anckor to ſeaward and a hawſer faſt on the land.

Matkorf.

A little to the eaſtwards of Tannebay lieth the pointe, and the land of Matkorf, from thence to Wardhouſe the coaſte lieth ſoutheaſt and by eaſt, ſoutheaſt, and moſt ſoutheaſt and by ſouth ſixteene leagues, betwixt them there is much high plaine land. Halfe waves betwixt both, but neareſt Wardhouſe, lieth a high hommock upon the high land, to ſee to like a caſtle, or Countrie houſe, verie good to be knowne, being thwart of it cloſe by land, it ſemeth as if there where a great Sounde,

Ward-houſe.

where men might ſaile into Wardhouſe are three little Ilands with ſome little rocks alſo by them, the ſouthermoſt is the greateſt of the three, which onely is inhabited, upon it is a village of about 300 Norwaye houſes with a caſtle, it is abouts a league long, and lieth an Engliſh myle off from the land, lying as the coaſt moſt ſouth and north, betwixt both, it is all over deep water. On the ſouth ſide of this Iland, lieth in a haven or great baye aboute halfwayes the Iland, and likewiſe one alſo on the north ſide, ſo that theſe two bayes doe come ſo neare one to the other, that there remaineth no more then a narrow chindle ſtrand about a ſtone caſt broade, dividing ſo the Iland almoſt into two, the eaſtermoſt part is the ſhorteſt, and higheſt, the weſtermoſt is the longeſt. Cloſe upon the ſtrand, on the E. ſide of the ſouther-haven lieth the Caſtle, to the northwards of it, upon the foreſaide chindle ſtrand, and about the Baye ſtand the houſes. In the ſouther Bay it is good lying, but the beſt roade is betwixt the maine land and the Iland, about halfe waves on the ſide of the Iland againſt a Sandbay, and right againſt the Caſtle, there is good anckor-ground, in tenne or twelve fathome landlockt for all winds, except for north and ſouth winds, which blow there right through, yet men hare ſome ſhelter of ſome point of the Iland. Men may without feare come in there, betwixt the Iland and the Maine, eyther from the ſouthwards or the northwards, it is all over cleanie and cleare, but he that commeth in from the northwardes, muſt runne ſomewhat nearer the Rock, where the gallowes ſtandeth upon, then the Iland, becauſe thereaboutes the Iland is a little foule.

Roade at Kilduyn.

About a ſhotte of a Caſt peece northwardes from the greateſt, lye the two ſmalleſt cloſe one to another, ſeeming a farre off to be one Iland, are together not an Engliſh myle long, but high and rockie to ſee to, there lye alſo 2 or 3 rocks by them.

On this coaſte like as at the North-Cape a northeaſt and ſouthweſt moone maketh high water.

From Ward-houſe to the point of Kegor or the Fiſhers Iland, the courſe is ſoutheaſt and ſoutheaſt and by ſouth ten leagues.

Betwixt them both is a great baye, where in are diverſ Sound and rivers, amongſt other the River Pitſing, which is a great faire and large River, where men may goe in with greate ſhippes, a good wayes within the river is good roade, there

there is taken and laden muſt Sammon, but there fall no other ſpeciall wares. Southſouthweſt from the poynt off Kegor lye two Ilands, to the ſouthwardes of them men doe runne into Monnick-forde.

Kegor or Fiſhers Iland.

Kegor is a faire haven, lying at the north end of the Fiſhers Iland, a little without the poynte; There lye two or three Rocks at the north poynte of the haven, and alſo a ſunken rock in the middeſt of the havens mouth; you muſt leave the ſuncken Rock, with the other Rocks on the ſtarboard ſide of you, and run in by the ſouth ſhoare and edge then behinde the foreſayd rocks, and anckor there in ſeven or eight fathome, the havens mouth lyeth in ſouthweſt, it is there ſo good lying as in anie havens there abouts on the coaſt.

Eaſter haven.

The Danes cal this haven Eaſter-haven, there was wont to be the Staple of the Fiſh, where everye one muſt come to buye: thereof the Iland is yet called, whereon Kekor lieth, the Fiſhers Iland.

It is indeede no Iland, but very neare: it is faſt to the mayne land, with ſuch a very ſmall neck, that the Ruſſes, which come from Kilduyn, or the River of Kool, and are bounde to the River Pitſing, doe hoe alongſt within this land, and hale their boates over that ſmall neck, for not to goe about a ſeaboard.

Laus.

From Kegor to Laus, the courſe is alongſt the ſhoare ſoutheaſt and by ſouth, ſomewhat eaſterlye nine or tenne leagues. This is a right playne coaſte, without poynts or bayes, all alongſt by Laus to Tiepena, but the ſouth poynte of Laus lieth out a little, upon which ſtand two Warders, to the northwards of that poynte is the haven of Laus, a fayre ſand-baye, there is very good lying for ſoutherlye or eaſterlye winds, but not for northerly winds, the winds betweene the northermoſt and northeaſt doe blowe therein open, and make therein a very great hollowe ſea, men lye there in twelve, tenne and eight fathome, according as they runne farre in, the farther the ſhowlder, but all cleane riſing ſand-ground.

From Laus a little towardes Kegor lieth a little Iland, behinde which is good anckoring for eaſterlye windes, in cleane ſand-ground, but it is ſomewhat narrow.

Tiepena.

From Laus to Tiepena, it is a great half league, at the point lye ſome little rockes, but you can not ſee them, before you be cloſe them. Tiepena is a fayre haven, when you come from the northwards, you muſt runne ſo farre to the ſouthwards, alongſt by the ſhoare, untill that you ſee open into it, and ſaile in amidſt the Channell. When as you come from the ſouthwards, the haven openeth it ſelfe, being come in, you muſt edge up to the northwards, and anckor there, there you lye landlockt for all winds, there are no dangers which may hurt you, but it is over all cleare and cleane ſandy ground.

A little aboute the pointe, to the ſouthwards of Tiepena, which is on the ſouthweſt ſide, of the Fiſhers Iland is another faire haven, where men may goe to anckor, called Kowens.

From Laus to the River of Kola, the courſe is ſouth and by eaſt and ſouthſoutheaſt about tenne leagues. But Kilduyn and Laus lye ſoutheaſt and by ſouth, ſomewhat eaſterly and N. W. and by north, ſomewhat weſterly, alſo tenne leagues aſunder.

The River Kool.

For to ſaile up into the River of Kool or Kola, you muſt goe from Laus, or the ſouth end of the Fiſhers Iland towards the River ſouthſoutheaſt and ſouth and by eaſt run about by the high land of Poden-wolck, and then the River ſhal open it ſelfe very wide. When you are by the point of Laus, you may ſee the Iland Kilduyn, and the River of Koole, or the land by it. Betwixt Laus and the River of Koole, is alſo a great baye.

Road in the River.

When as you are in the mouth of the River, it lieth in firſt ſouth and by weſt, & then ſouthſouthweſt, to that Iland, which ſtandeth marked with A in the Carde of this, River, and then by little and little ſouthweſt and by ſouth, alongſt by the Iland marked with B unto the Trayne Iland then ſouthweſt and by weſt, and by little and little about the point weſt and by ſouth, afterwards in weſt, unto Divels point; over againſt it lieth the White ſtone, which lieth upon the land, thwarte of it is good roade. From thence againe weſt and by ſouth, weſtſouthweſt, ſouthweſt and ſouthſouthweſt unto Kool.

When as you com into the River, and will ſeeke roade there, you muſt keepe alongſt by the weſt ſhoare, being ſomewhat within you ſhall ſee a little Iland lying cloſe by the ſhoare: from thence ſomewhat further about the high pointe is a Bight or Baye, and in that Bight a Sand-baye, where men may ſave a ſhippe without anckor or cable, that is a faire Sand-baye, where men may runne in all alongſt.

Alongſt by the north ſide it is five fathome deepe, and cleane ſand-ground, men runne in there betwixt the two pointes, but there lieth a black Rock in the narrow, betwixt both ſheares, which they muſt leave lying on the ſtarboarde ſide, within that rock it is three and two fathom deepe unto the ſtrand, within there is faire greene field.

A little without the Baye lye two Ilands, whereof the outermoſt or eaſtermoſt is the ſmalleſt. When as in ſailing up alongſt the River, you may come by theſe two foreſayd litte Ilands, about halfe wayes to the Iland marked with A, there is alſo good roade, at the weſt ſhoare, you ſhall ſee upon the high land three Warders, called the three Kings thwarte of them is the roade.

Roade three kings.

When you are ſomewhat paſt the Iland A you can not ſee the River any more open, but it ſeemeth to bee ſhut, and cloſe, for that Iland by A commeth then under the high land, on the eaſt ſide.

Roade.

Under the Iland marked with B is alſo good roade and clean ſand-ground.

Likewiſe is alſo good roade under the Trayne Iland, that is reckoned for the halfe of the River, to wete, off from the mouth of Kool.

When as you come now a little paſt the Trayne Iland, where the C ſtandeth, then you ſhall ſee out a head a black blewe hil, called the Divels hill, it ſeemeth there to ſee to, as if the River where cloſe and ſhut. It is beſt ſayling alongſt by the ſtarboard ſide, there you have moſt all ground cloſe by the land. There are many Bights, points, and Bayes, which are not all to be deſcribed.

Divels hil.

On the other ſide men doe not come ſo commonly, (except it be againſt their wills) there ſeeme alſo to bee many bayes and roades, and alſo ſome little Rivers. When as you come alongſt by the Divels hill, where the D ſtandeth, paſt the White ſtone, then you may ſee the Klinck-hil on the weſt ſide, and almoſt all alongſt unto Kool. When as you may ſee the Klinck-hill, there is ground by the weſt ſhoare for to anckor in, then there are on both ſides no daungers, but when as you come ſo far into the place, where the letter E ſtandeth marked, there you muſt ſomewhat ſhunne the weſt ſhoare, becauſe of a little ſhowld which ſhooteth off from the ſhoare, and keepe in the middle of the channel, untill that you come againſt the Klinck-hill, there you muſt againe goe cloſe alongſt by it, in the middeſt of the fareway lyeth an Iland of Rocks, which at high water is covered, whereof you muſt take good heed.

Klinck hil.

Rocks.

From the Klinck-hill unto the Robben Iland ſaile al alongſt by the weſt ſhoare, the Robben Iland is alſo covered at high water, but when it is under water, then anckor thwart of the burnt trees. Thwart of the Robben Iland lieth a very great rock, as ſoone as you be thwart of the high land, looke out carefull for it, and keepe without it, or to the northwards of it, to wete a bow ſhot, there is the roade, there you may anckor by the ſhoare ſo ſhowld as you pleaſe, it is there good lying, and there you begin to ſee Kool alongſt by the houſe. Betwixt the Iland Kilduyn and the River of Kola, ſomewhat nearer the River then the Iland, lyeth a haven, called Blieſna Silenſi, that is to ſay, the nexte to Silenſi, there you ſayle in by a round reddiſh Hommock, being come within it, you muſt edge to the weſtwards, ſo that the haven is altogether ſhut, and that you can ſee no ſea, you may anckor there ſo deepe or ſhowld as you will, it is there every where cleare & cleane white ſand ground, and ſomewhat oazye & ſofte, there you may alſo without feare ſaile on againſt the ſhoare in the oazye, and ſo may ſavè a ſhippe without anckor or cables.

Kobben Iland.

Blieſna Silenſi.

The Iland Kilduyn is about two leagues long, & one league broade, and lyeth weſtnorthweſt and eaſtſoutheaſt alongſt the land, like as alſo the channell betwixt the Iland and the maine land, which is at ſome places about a halfe league broade, and at ſome places norrower, but all over very deepe and cleane. About the middeſt, yet neareſt the eaſt ende, is a faire cloſe roade, betwixt two points, that lye out towards the maine land, there men lye under the Iland, cloſe to the ſhoare, before the Laps tents, under the eaſtermoſt point, which is a low plaine point, in twelve, thirteene, or fourteene fathome, ſand-ground, more to the ſouthwards, it is very deepe, you ſhall ſoone have fifty and ſixty fathome.

Kilduyn.

If you will goe to anckor under Kilduyn comming from the northwards or the weſtwards, then run about by the weſt end, in betwixt Kilduyne and the mayne land. When you are come ſomewhat within, you ſhall eſpy a little round Iland, there the Channel beginneth to be narrow, yet it is broade enough for to turne to windwards through, ſaile forth towards the ſoutheaſt end, untill you come in betwixt thoſe two points, and run to the foreſayd low point, and anckor there within the bight, before the cabbens ſo neare to the land as you pleaſe, there you lye landlockt for all winds, as if you lay within a towne in a cloſe haven.

For to go into Kilduyn from the weſtwards.

For to ſayl into Kilduyn from the eaſtwards.

For to ſaile in from the eaſtwards, you muſt ſaile in to the weſtwards by the eaſt end, ſo long untill that you come by the

the foresayd low poynt of the Iland, then edge up about it to the northwards, and runne into the foresayd bight, before the Cabbens, and anckor there in twelve, thirteene and fourteene fathom, that is the chiefest roade.

At the north and east end of Kilduyn, betwixt the Iland and the maine land, there is also a very good roade, in eight, tenne or twelve fathom, where men may lye sheltered for all winds. Thereabouts is on the Iland a good water place, there the water commeth running off from the high land, there men may goe lye by it, and fill their caske lying in the boate.

You may also anckor under the maine land, betwixt the narrow, and the Roade of Kilduyn, at the place where the anckor standeth marked, in the Carde. At the east end of Kilduyn lyeth also a Fishers village, called Kammen, at a high point, which is called the Sacrifice point.

From the Iland Kilduyn to the point Tiribiry, the course is southeast, and southeast and by east about five leagues, betwixt them is a great bay. In this bay, a great league from Kilduyn lyeth a high Iland called Bliesna, Olinie, which is the next or the neareſt Olinie, behinde it, under the mayne land, neareſt the south end of the Iland is a good roade, where three or four ships may lie verie well. Bliesna. Olinie.

There lyeth a round hill, or high Hommock upon the main land, which sheweth out above all the other hommockes, and is very good to be knowne, upon which standeth a high crosse of two crosses one above the other, to the northwards off two crosses lyeth a flat poynt, thwart of it lye some rocks alongst the shore, which at high water are covered.

At the south end of the Iland Olinie, a little from land, lieth a rock almost even with the water, but you may alwayes see it well by the breaking of the water.

To the northwards of the Iland about an English mile, lieth a rock not farre from the land, and also to seawards from it a suncken rocke, which you can not goe over at low water.

Hee that will (comming from the northwards) goe to anckor behinde Olinie, must runne a good wayes to the eastwards of this foresaid rock alongst to the northwards of the Iland, for to avoyd the foresaid rock. Being come behinde the Iland, you shall espy the foresayd round hommock with the crosse, you must not run past the crosse, but leave it on the larboard side, and sayle in close by it for to avoid the foresayd rockes, which lye off from the flat north point, the point with the crosse is very cleane and so steepe, that you might lye with a ship on against the shore without any hurt.

He that will come into this Roade from the southwards, let him run alongst by the coaste, which is very cleane, untill past the foresayd poynt with the crosse, and edge up close by it, as is beforesayd.

Men doe anckor within the point in seven, sixe, five, foure, and three fathom, so deepe or showld as they will, there can no grown sea at all.

About halfe wayes betwixt the Iland Olinie and Tiribiry is another haven or great Bay, where men may lye landlockt for all winds.

Tiribiry. Tiribiry is a great River and off-water, where is a great Sammon fishing, there men may goe in with great shippes, and anckor every where within it where they will in good sandy-ground, it lyeth in most south, and afterwards more westerly, the eastermost point lieth out more to seawards then the other, so that it maketh a bay, where men ride under for a northwest winde.

Two leagues to the southwards of Tiribiry lyeth Waronia, which is a great sand-bay or haven, which at the mouth is narrow, but within it is a broad sound, there is also an off-water, where is also much Sammon caught.

Within this bay it is every where good anckoring, showld water and cleane ground.

Before the mouth of this haven lie three little Ilands, behind them is also good road.

Two leagues or two leagues and a half to the southwards of Waronia lieth a Gabriele, a tyde haven, which falleth dry within, so that men may goe over there dry at low water, it floweth there twelve foot up and downe, a southsouthwest moone maketh high water on this coast. Gabriele.

In the mouth of this haven lie 3 Ilands, two on the northside (which are the loweſt) and one in the south side, that is the higheſt, you must runne neereſt the southermost when as you will sayle in there: being come within the Ilands, you must edge up to the northwards behinde the 2 northermost Ilands, and ankor there on the northside of the haven, there it is seven and eight fathom deepe cleane ground.

Daelna Silensi. About a league to the southwards of it lieth Salensi Daelna, that is to say, the farther Salensi; but betwixt them both a little to the northwards of Salensi, lieth yet a great indraught, which lieth in at least two leagues into the land, and is about so wide as the River Tye before Amsterdam, there may lie a great multitude of shippes, it is there broad and large enough, and al over good anckorground.

A little to the northwards of this in-draught lieth a little the Ilands, or rock, somewhat high, about which you may saile within, to wete, through betwixt these rocks and the land, but may make no roade under them.

Salensi Daelna is a great broad bay, before it lie three Ilands, which are to see to gray of colour, as the maine land. Daelna Silensi.

To the northwards of these Ilands upon the poynt off the bay, standeth three great Warders, and a little to the southwards of the Ilands, on the maine land, lieth a steepe hill, by which marckes this bay is very good to be knowne.

If you will saile into this bay, comming from the northwards alongst the shore by the foresaid great in-draught, a little to the northwards of this baye, you must looke out for these foresaid great Warders, leave them on the starboard side, and sayle in close by them, through betwixt that poynt and the Ilands, first westsouthwest, somewhat within, and then more southerly, untill behinde the Ilands, and anckor there in five, six, or seven fathom: you may also sayle further to the southwards into the baye, so deepe as you will, there it is all over cleane.

When you come before the channell, it seemeth to be very narrow, but it is broad enough.

To the southwards of these Iland is also a channell which is very narrow, but yet for need you may sayle out there. The southermost Iland, that is, whereupon the Fishermen dwel, is fast to the northermost with a showld, whereupon is at high water ten or eleven foot water, but at low water you can not goe over it.

Two little leagues too the southwards of Salensi lieth the Iland Daelna Olinie, that is to say, the furtheſt Olinie, it is an Iland almost of Fashion like Bliesna Olinie, at the north end high, at the south end lower, and upon the end very steepe, it hath in the middest, (but somewhat neerer the south end then the north end) a low valley, where at high water the sea doth almost run alongst over it. Daelna Olinie.

Behinde this Iland, not under the Iland, but under the mayne land, are good roades.

For to come in from the northwards behinde this Iland, it is a broade, large, and very deepe channell, without any dangers, but if you will sayle in behinde it (from the southwards) then you must runne in close by the Iland, for to avoyde a foule and stony riffe, which lieth off from the mayne land, halfe wayes to the Iland, and so showld that it falleth dry with the spring tydes at low water.

About halfe wayes the Iland, neareſt the south end, is a point, lying out from the maine land, towards the Iland, to the northwards of it men doe anckor in 6, 7, or 8 fathom.

When you come in from the northwards, you may (so soone as you come within the points) luffe up towards close about the poynt of the main land into a bay, and anckor there in eight, six, five, or foure fathom, according as you sayle far in, there it is very good lying. In these roades under the maine land, it is all cleane and flat rising ground, but under the Iland it is deepe, and the ground rising very steepe, and therefore it is not good anckoring there.

Betwixt this Iland Daelna Olinie, and Silensi, lie three little black Ilands, where is very good road under them, in eight, seven, and six fathom.

From Daelna Olinie to Rinde are five leagues. Rinde is a very fayre Haven, before it lie foure little Ilands, where men may goe to anckor behinde them, behinde these Ilands this Haven hath two bayes, upon the point betwixt them both standeth a great Crosse, the southermost baye is farre the greateſt, into it commeth also a river, or off water, where men doe catch Sammon. The middlemost Iland (which is the northermost save one) is the greateſt and higheſt upon which standeth a great Warder, the northermost is somewhat long and small, and so low, that at high water the sea runneth up a good wayes upon it on both sides, and so maketh the Iland smaller. Rinde.

Betwixt that Iland and the maine land, or the north shore of the Havens mouth lieth a suncken rock, which you must leave, in comming in, on the larboard side, and runne in close by the main land, this channell is so narrow, that you can not sayle it in, except you have a large winde, at low water there remaineth no more then nine or ten foot deepe.

To the southwards of that great Iland, lyeth another Iland that is indifferent high, and the southermost of them all, betwixt that and the point of the maine land, lieth in the souther

channell, which is broad and deep enough, but when you ſayle in there, you muſt run neareſt the Iland, for to avoid a ſuncken rock which lyeth at the foreſayd poynt of the mayne land.

Theſe channels both from the ſouthwards and from the northwards lye in both alongſt the ſhoares, when as that you come then within the Ilands you may anckor there all over where you will, there it is broad and large, and every where cleane and cleare. Men doe anckor commonly under the greateſt Iland thwart of the great Warder, and alſo behinde the northermoſt Iland in five, foure, or three fathom, there it is very good lying, but with a ſoutheaſt winde, the ſea commeth a little rowling in, but there can goe no great ſea.

I arre within the ſouthermoſt bay, allmoſt before the river, lyeth a rock, but above water. Without the greateſt and the ſouthermoſt Iland, lieth alſo a little Iland, or great rock, ſomewhat round, you may ſaile out and in betwixt the ſouthermoſt and the greateſt Iland, alongſt to the northwards of that little round Iland, that is you leave the ſouthermoſt Iland with the outermoſt little round Iland both on the ſtarboard ſide, and the greateſt Iland with the Warder on the larboard ſide; when you ſayle out, this is a verie narrow channell, but verie cleane and cleere, ſo that there is a very narrow channell, but very cleane and cleare, ſo that there is nothing to be avoyded, but onely a little ſuncken rock, which lieth at the north end of the outermoſt little round Iland, and falleth dry at low water, nevertheleſſe it is not good to uſe it, except it were for need that you could not doe better.

He that is bound into this haven, muſt run cloſe alongſt by the ſhoare for to get ſight of the foreſaid Ilands, for by reaſon that the inner land is high, the Ilands lie ſo under the land, that men can hardly ſee them, when they be any thing off from the ſhoare.

A halfe league to the ſouthwards of Rinde is another great Bay, or haven, before it lie two little high Ilands upon the northermoſt ſtandeth a great croſſe, you may ſaile in there about on both ſides off theſe little Ilands, and alſo through betwixt them, and anckor where you will in fifteene, twelve, eight, or five fathom, deepe or ſhowld, according as you ſayle farre in, & lie there ſheltred for al windes, but when the winde is harde out of the ſea, thwart upon the ſhoar, there wil com in ſomwhat a rowling ſea, but there can goe no great ſea that can hurt you. A little to the northward of this haven lieth a low long Iland cloſe to the ſhoare whereby you may alſo know this coaſt, you may ſail throug betwixt this foreſaid Iland and the maine land without any danger.

From this haven to the Seven Iland are foure great leagues. A little to the northwards of the end of the Seven Ilands, lieth a faire great ſand-bay, where is alſo good anckoring for ſoutherly and ſoutheaſt windes, but not for eaſterly winds, with a northeaſt or ſea wind, it is bad lying there for there is no ſhelter for them, men doe anckor there in twentie, fifteene, or twelve fathom, according as they lie far or neare to the ſhore. The Ruſſes call this Bay the Golden Bay, becauſe the ſtrand is of red ſand.

Gold en-Bay.

On al theſe foreſaid coaſts a ſouthweſt and northeaſt moone maketh high water, like as on the former.

Seven Ilands.

The Seven Ilands lie of them alongſt the ſhore, the firſt or northermoſt is farre the greateſt of all, a high Iland. The four northermoſt follow cloſe one to the other, and lie about an Engliſh mile, or a ſhot of a caſt peece, a little more or leſſe of the land, ſo that men may ſail there through betwixt. The fifth is a little round Iland, and lieth nearer to the land, there you can not runne through within it, which is faſt to the land with a ſhowld of rocks, whereof ſome lie above, and ſome under water. The two ſouthermoſt lie a good wayes to the ſouthwards of the fifth: betwixt them and the maine land you may alſo ſaile through, you may alſo runne through in and out betwixt theſe ſame Ilands everie where, except betwixt the ſecond and third to then off from the northwards, betwixt them it is fowle.

The firſt Iland.

Betwixt theſe Seven Ilands and the mayne land, goeth a ſtrong tyde, as well of flood, as of ebbe, whereof men muſt be very carefull.

Betwixt the northermoſt and the maine land is a good road (thwart of the ſouth end of the Iland) under the maine land, there is a faire ſand-bay, with an off-water, where is much Sammon to be caught, but it is not there uſed.

A little to the northwards of this Sand-bay lieth a little Iland betwixt the great Iland and the coaſt, men doe anckor to the ſouthwards of that little Iland, thwart of the ſandbay in ſeven, ſix, five, or foure fathom, ſo ſhowld as they wil, there is a very even ſand-ground, riſing ſo even as if it were planed.

Over againſt the foreſayd bay men may make roade under the ſouth point of the Iland, thwart of a little bay, there they bring a howler on land, & an anckor to ſeawards in nine tenne fathom, there they lye ſomewhat more out off the tyde then in the bay over againſt it.

Betwixt this great Iland and the coaſt is about two third parts of the channel towards the main land, flat riſing ground, and the other third part towards the Iland Deep; the nearer the Iland the deeper unto eighteen and nineteen fathom.

About halfe wayes betwixt that foreſaid little round Iland, and the north poynt of the greateſt Iland, ſtand on the mayne land ſome little Lappiſh houſes, or a little village.

Second & third Iland.

Betwixt the ſecond and third Iland, or neareſt thwart of the ſecond, to tell from the northwards, lyeth yet a little village, thwart of it is a bay where men may anckor in tenne or twelve fathom all cleane ſand-ground, but with a ſoutheaſt wind there commeth in a rowling ſea, but with northerly winds it is very good lying there.

The fourth Iland.

Thwart of the fourth Iland on the mayne land, is alſo a ſand-bay, where is alſo good road in ſeven or eight fathom for a northweſt or north wind, but with an eaſt winde it is there bad, lying, that bloweth there in open through betwixt the fourth and fifth Iland.

The Shipper.

Even at the end of the ſeven Ilands is a great Indraught, or bay, which the Ruſſes call the Shipper, which is narrow at the comming in, but within indifferent large and wide: within it is good road in 12, 8 and 4 fathom clean riſing ground, but with a n.e. wind it is bad lying there, that bloweth there flat in.

About nine leagues to the ſouthwards of the Seven Ilands, lieth a point called Siornenos, that is to ſay, Black-point, it is ſo called, becauſe it it very black to ſee to, there within it the land is high, and goeth downwards lowe towards this point, almoſt as Swetenoes.

At this point the land beginneth to alter in forme to the northwards of it the coaſt is altogether high, but to the ſouthwards of it all low and even land, ſo that thereby you may know (when you ſayle alongſt this coaſt) whether you be to the northward or to the ſouthwards of this black point.

Noock Oſtrove.

A little to the northward off this poynt lyeth a high and great Iland a halfe league long, which the Ruſſes call Noock Oſtrove, which is the Nayle Iland, behinde it is very good roade, you muſt run in there from the ſouthwardes, from the northwards, you can not come in there behind it.

The north end is faſt to the maine land with a bancke or ſtrake of ſand, which lyeth moſt part above water, you may ſayle in there ſo far behinde it, as you will, and anckor in ten, eight, 6 or 4 fathom, the further that you ſayle in the ſhowlder it is, there it is very good lying, and ſheltered for all winds.

Evanekriſt

From the Siornenos, or the black poynt to Evanekriſt, it is ſouthſoutheaſt 4 or 5 leagues, that is a point with many croſſes, under it you may make roade for ſoutherly winds.

Kletna.

From Evanekriſt to Kletna are yet three or foure leagues, this is a pointe whereupon ſtand alſo many croſſes, it lyeth out a little but not ſo much as Evanekriſt, there you may have alſo road for ſoutherly winds, but not for ſeawinds.

Lands of Iockena.

From this poynt to the Ilands of Swetenoes or Jockena, it is two leagues, there are ſix in number, whereof the five lie alongſt the ſhoare about the ſpace of two leagues, the ſixth lyeth within the other, thwart of the ſouthermoſt of the five: The three northermoſt lye one by the other, as alſo the two ſouthermoſt parted aſunder from the other three the northermoſt off all theſe Ilands of Jockena lyeth from the poynt of Swetenoes due weſt three leagues, behinde it is good roade thwart of the ſouth end in five or ſix fathom. The poynt of Swetenoes is a flat poynt lying out to the weſtwards of it, at the end of thoſe foreſayd Ilands, goeth in the river of Jockena, where is a great Sammon-fiſhing. When you are by Swetenoes you can ſee little perfectneſſe of theſe Ilands, becauſe the mayne land is much higher then the Ilands.

Swetenoes.

For to ſail into the River off Iockena.

He that commeth from the northwards, and is bound in to Jockena, muſt runne cloſe alongſt by the ſhoare, for to get ſight of theſe Ilands. Through foure ſeverall wayes you may ſayle through theſe Ilands into the river of Jockena: Firſt comming from the northwards, you may ſaile alongſt by the ſhoare, through betwixt the ſhoare and the Ilands, (which you leave then all on the larboard ſide) into the river.

The ſecond paſſage lyeth in through betwixt the three northermoſt, and the two ſouthermoſt Ilands, that is a broad, wide and deepe, and alſo the beſt channell off al, it lyeth S. weſt, and ſouthweſt and by weſt from the poynt of Swetenoes, and lyeth in moſt ſouth, when you ſayle in there, you muſt runne neareſt the ſouthermoſt Ilands, becauſe of a ſuncken rock which lyeth in this channel ſomewhat off from the third Iland, at high water you may run over it, but not at low water.

Being

Being come within theſe Ilands, you ſhal ſee the ſixth Iland, which lyeth within the two ſouthermoſt, you muſt run about by it, leaving it on the larboard ſide; When as you are then a little paſt that innermoſt Iland; you come againſt the high poynt, and ſayle in alongſt amidſt the channell, betwixt both lands, there it is ſhowld water, to wit, five, foure, three, to two fathom and a halfe, but you may ſayle in amid the channel without feare, all alongſt unto Lappiſhouſes, where the Sammon-fiſhing is, and anckor there alſo in the middeſt of the river, thereabouts lye ſome funcken rocks, which at low water are uncovered, whereof you muſt take heed.

For to have the right knowledge of this channell, you muſt looke out for the high poynt, which lyeth at the weſt poynt of the river, within theſe Ilands, when that is behinde the fourth Iland (to reckon off from the northwards) and the point of Swetenoes is northeaſt, and northeaſt and by eaſt from you, then you are right open before the foreſayd channell.

Betwixt the two ſouthermoſt Ilands goeth alſo an indifferent wide channell through, where men can ſayle in, and ſo come on againſt the innermoſt Iland, which you may ſayle about on both ſides.

Betwixt the Ilands and the mayne land, you may alſo ſayle through, but that is a very narrow channell, men ſayle through it, as if they ſayled in alongſt a ditch betwixt two Dykes.

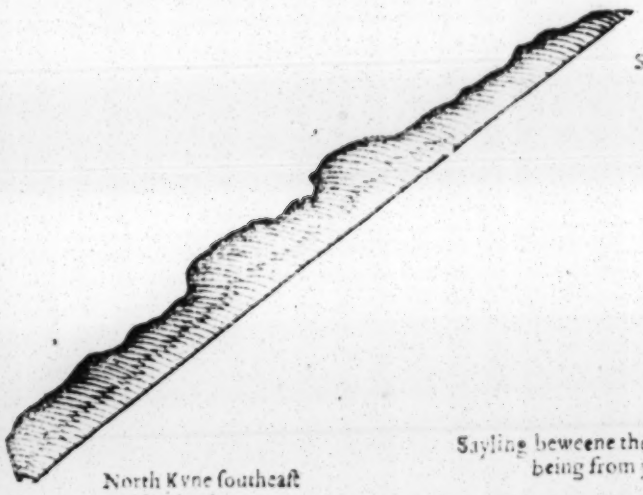
For need, or if it were in extremity, you might alſo ſayle through at high water betwixt the northermoſt Iland, and the ſecond and likewiſe alſo betwixt the ſecond and the third, but if you can be any means doe better, it is not good to doe it.

Men may anckor at divers places within theſe Ilands. Betwixt the two ſouthermoſt Ilands, and the innermoſt Iland, you may have roade, where you may lye ſheltered for al winds, and ſafe from Ice-drifts out of the ſea. Within the innermoſt Iland you muſt alſo anckor over againſt it ſomewhat further in againſt the ſteepe poynt. At the rivers mouth, on the weſt ſhoare is a bay where you may ſayle in, and anckor ſo neere to the ſhoare as you will, in ſix, fiye, foure, and three fathom ſoft ſticking ground, there you lye ſafe from Icedrifts. You may alſo anckor on the eaſt ſide, right before the ſteepe poynt, but there you lye not ſafe for ice that commeth out of the river. The tyde here alongſt theſe Ilands, agreeth neere with the tyde of Swetenoes, it floweth the ſpring tydes neare to two fathom and a halfe up and downe.

Behind the poynt of Swetenoes you may run into the bay, and anckor there for a north, northeaſt and eaſt winde, there is cleane ground.

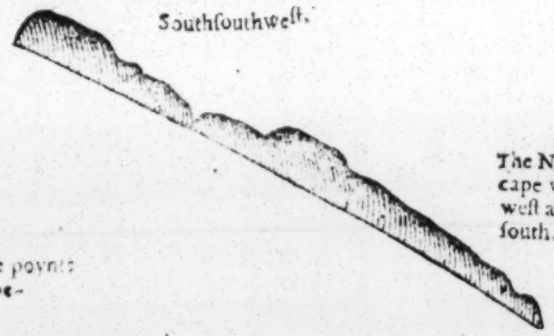
At Kilduyn an E. S. E. moone maketh the higheſt water.

Alongſt theſe coaſts of Lapland to the eaſtwards of the North cape, the flood commeth out of the northweſt and N. N.W. and ſo runneth alongſt the land unto Orlogenes.





Sayling betweene the North-Kape and North-Kyne, and the poynts being from you, as ſtand here by written, the Bay betwixt them both ſheweth thus.





The poynt of Tanebay. South and ſouth and by eaſt. Kyne ſouthſouthweſt. This lyeth by weſt Kyne.



Thus ſheweth the land betwixt North-Kyne and Tanebay, when the North-Kyne is S.S.W. 8 leagues from you and the poynt of Tanebay, ſouth and by eaſt.



Thus ſheweth Kyne when the hill with the Croſſe is ſouthſouthweſt from you two leagues.

Southſouthweſt. The weſt poynt of Kyne.



Thus like the Mother.

When this hill with the Croſſe is ſouth and by weſt from you, two leagues, then ſhewed North-Kyne thus.

Kyne ſouthweſt and by weſt.

Tanebay.



Thus ſheweth the land betwixt Kyne and Tanebay, when you ſayle alongſt by it 7 or 8 leagues without the land Kyne being ſouthweſt and by weſt from you.

Tanebay.



Thus ſheweth the Tanebay, when as you come off by Kyne, cloſe alongſt by the land, you may ſee theſe two poynts on againſt the high Inner land, the eaſt point ſheweth it ſelfe, almoſt like Portland, the weſt poynt ſheweth it ſelfe firſt ſloping, but when you come by little and little before the Sound, then it will be alſo ſteep.

Matkorf. Tanebay. Kyne.



When as Matkorf thwart from you, then it ſheweth, and the land to the northwards of it towards Kyne thus.

Tanebay. Kyne.



Thus is the land to the eaſtwards of Tanebay, when as you ſayle alongſt by it three leagues without the land.

Wardhouſe. The land to the northwards of Wardhouſe.



Thus ſheweth the Iland Wardhouſe, when it lyeth ſouth from you, three or foure leagues.

Iland Wardhouſe The maine land.

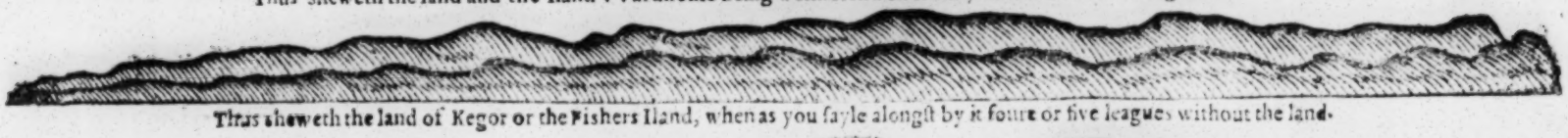


In this forme ſheweth the Iland Wardhouſe, and the land to the northwards of it, when it is ſouthſouthweſt a league and a halfe or two leagues from you.

Thus



Thus sheweth the land and the Iland VVardhouſe being weſtnorthweſt from you three or foure leagues.



Thus sheweth the land of Kegor or the Fishers Iland, when as you sayle alongst by it foure or five leagues without the land.



Thus sheweth the land of the Fishers Iland, when as you sayle alongst by it comming from the weſtwards comming from the weſtwards.

Kilduyn. Maine land. River of Kool.



Thus sheweth Kilduyn, when the steepe point lieth S. and by east, and the River of Cool S.W. about five leagues from you, and the land to the weſtwards of Kilduyn is very litle, and the river doth shew it selfe verie wide open as here standeth portrayed.

The River of Kool.



Thus sheweth the land of Kilduyn, when the weſtermost point southwest and by south, and the eastpoynt south and by west, from you: the river of Cool lieth then southwest and by west from you, the maine land that you may see to the eastwards lieth then southeast and by south, somewhat southerly from you: the land of Laus you may then yet also see in the northwest.

Iland Kilduyn.



These three Figures belong one to the other by the Crosles.



Poynt of the Fishers Iland.

Thus sheweth the Iland Kilduyn, and the land to the northwards of it in the bay towards Fishers Iland, when as you are betwixt them both seven or eight leagues from land, Kilduyn being about south, or southsouthweſt from you.

Tiribiry. Iland Kilduyn.



Thus sheweth the land eastwards from Kilduyn, when the south, or east end of Kilduyn is west and by north three leagues from you.

The land of Tiribiry.



The Iland Kilduyn.



The Iland of Kilduyn and Tiribiry shew thus, when as you sayle alongst by them foure leagues from land, about halfe wayes betwixt both, nearest to Tiribiry, as is portrayed in these two figures here above, the AA one to the other.

The land of Tiribiry.



The Iland Kilduyn.



In this forme sheweth the land of Tiribiry, when you sayle alongst by it, being 4 or 5 leagues from it, and eleven or twelve leagues from Kilduyn.

Swetenoes Third poynt Second poynt First poynt Swetenoes.



Sconce.

Thus sheweth the land betwixt Swetenoes and Orlogenes, as you sayle alongst by it.

The third Demonſtration,

Where in are ſet forth the Seacoaſts and Havens of Swetenoes the Whole White Sea.

Lombaſcho. FRom Swetenoes to Lombaſcho, the coaſte lyeth southsoutheast thirteene leagues. Under Lombaſcho men may also goe to anckor, but it is not there very good lying, especially with great shippes; the ground there is not cleane, and when the winde out of the Sea, commeth in there rowling very much. The lying of this roade standeth drawne out at large in the Card, with the depths set downe as it is at high water and neepe tydes: the water falleth and floweth there at least two fathom up and downe, and at Springtydes little leſſe then three fathom, or two fathom and an half.

Within the point, or in the bight of Lombaſcho you may not anckor, there remaineth not above three foot water, and the ground is stonie and foule.

To the northwards of Lombaſcho lye five Ilands lying alongst the coaſt almost halfe wayes to Swetenoes.

Orlogenes. Three leagues to the southwards of Lombaſcho, lieth a black steep point, untill there the coaſt lieth of from Lombaſcho also S.S.E., but from that point to Orlogenes, the course is S. 9 leagues, betwixt them there is no place where men may anckor, but all alongst a whole coaſt, cleane and steepe.

From the poynt off Orlogenes lyeth off a stone-riffe a shot off a caſt peece into Sea, which falleth dry a great wayes at low water, whereof men muſt take very good heed.

From Orlogenes to the river of Ponnoye, it is five leagues: betwixt them lye the three Ilands. First from Orlogenes to the two first Ilands, the course is south three leagues, and from thence to Ponnoye southweſt and by south three leagues. Three Ilands.

A halfe league to the northwards off Ponnoye lyeth the third of the three Ilands, so that the two and the third lye about two leagues asunder.

These Ilands are much lower then the maine land, so that they can hardly be seene or not at all, except you be by the shoare, thwart of them you may come neere to the shoare in seven fathom without danger.

Thwart of these three Ilands, and Ponnoy, the mouth off the white sea is at the narroweſt.

About foure leagues thwart off to seawards from the three Ilands in the middeſt of the mouth, lyeth a showld, which is very uneven and stony, and at some places with low water commeth dry above water, it lyeth south and north, first north alongst the coaſt, at last northnorthweſt untill thwart of Lombaſcho, but there alongst it is deepe enough, 15 and sixteen fathom. About southeast from Ponnoy it is at the showldeſt seven fathom deep. You may also sayle alongst to the eastwards of this showld into the white sea, but there it is showld water, uneven and very showld. The right fareway is alongst to the weſtwards of it, and five and twenty fathom deep.

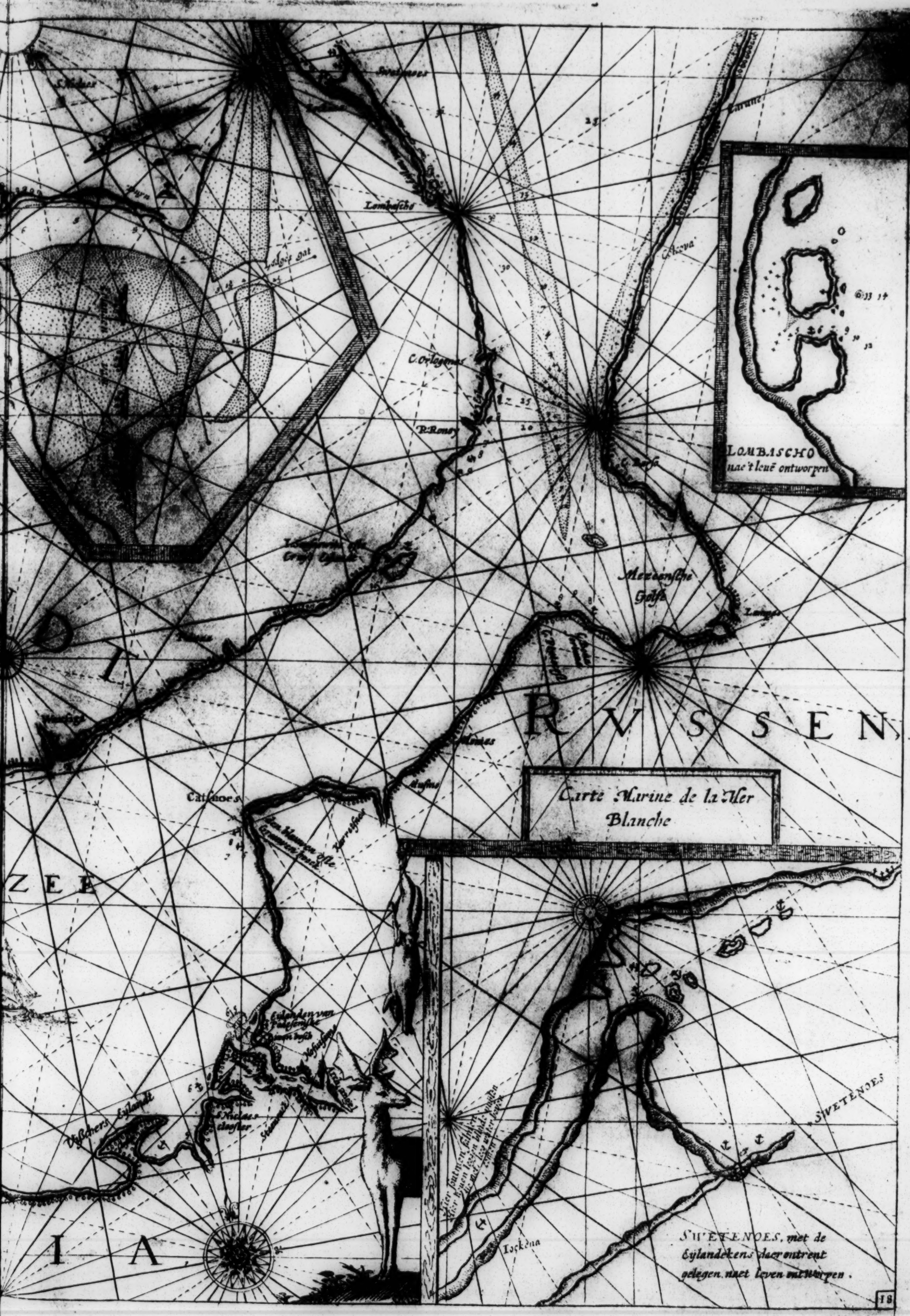
Ponnoy is a River where at low water remaineth no more then

De Riviere Dwina
vande mont of tot de
Stadt Archangel toe

Pascaerte
vande
VITTE-ZEE
Nieulijcx beschreve
door
Iacob Aertzen
Colom

Duytsche Mijlen 15 in een graedt
Spaensche Mijlen 17½ in een graedt
Engelsc. en Fransc. Mijlen 20 in een graedt

C O
R E
L A P
W I T T E -


Lombaschos
C. Orlogmus
P. Romey
Mezeensche Golfe
LOMBASCHO
nae 't leuē ontworpen
Carte Marine de la Mer Blanche
Catsnoes
Kildin
Iockena
SVETENOES
SVETENOES, met de Eylandekens daer ontrent gelegen. naet leven uitgeworpen.
18

MUSEUM

then ten foot water, it floweth there with a spring-tide 3 fathom up and downe, and with an ordinary tyde fifteene foot.

From the three Ilands to the Iland Sousnowits: which men doe call the crosse Iland, the course is s.w. and by s. or as some doe hold s.w. 10 leagues, or from Ponnoy 9 leagues. Al alongst this coast men may anckor every where in 8 or 9 fathom, and with contrary winds stop the tydes, there goe strong tydes (especially in the spring) of the yeare off an Ib. Between the 3 Ilands and the crosse Iland lieth a point, upon which stand also three crosses, one by the other, which men doe mistaken oftentimes for the crosse-Iland, but it is much smaller to see to. When you doe get sight of that poynt, there sheweth by it, as if there lay a shippe before the land with the topmast-stricke. The right crosse Iland hath upon the north end two Crosses, and upon the South end three, by al these markes they are good to bee knowne one from the other.

Behind the Crosse-Iland you may have road in 6 or 7 fathom, you may sail in behind it, as wel from the n wards as from the south-wards, it is there cleane & cleare every where, men doe ankor, that the great crosse doe stand from them e. n. e. there is the right road.

Current in the mouth of the White sea.

Southeast and by south from the three Ilands, and Ponnoy on the Russe side, there goeth in the Mesceens golfe, into which commeth a great River, where men may go up to Kilda, and Kolmogro, and also another, upon which the town Slowoda lyeth.

S.E. from Ponnoy lieth a litle Iland in the mouth of the Mesceens golf, where you may have road under for westerly and S. W. winds.

The south poynt of this golf is a low sand-strand, all grown with trees, there you may also anckor alongst by the shore, but close by the land; if you lye somewhat of from the shore in nine fathom, there the ground is foule, from thence alongst the shoare to the Blewe poynt, it is all a fayre strand.

From the Crosse-Iland to the blew or gray poynt, the course is s.w. 20 leagues. In this fareway in the mouth of the White-sea, there goe somtimes very strong currents, especially in the spring, throug the terrible great frestuts, of the melting of the snow, which falleth from both sids into the White-sea, & runneth through this strait into the sea, with great whirling and terrible riplings: It happeneth somtimes that the current runneth here so terrible strong, to the w. wards into the sea, that with a reasonable gale and full tayls, men can doe no more but stem the tyde, whereof men must be mindful.

Gray point.

Under the gray poynt men may anckor on the south side, in ten, eight, or seven fathom, there it is good lying for easterly winds, a northeast winde commeth from the poynt the ground is there reasonable good, but not the cleanest.

From the gray poynt eastwards to the Mesceens Golf the coast is all faire sand-strand, with some bancks of two fathom and an halfe, and three fathom alongst the shoare, not farre without the Land, where sometimes the current falleth over, with great riplings.

From the blew point to the river of Arch-Angel, the course is S. & by w. 13 leagues. When as you sayle so towards the rivers, you shal then first espy the land a good wayes to the westwards of S. Nicolas, it arriseth in a long strake, & then there riseth more land towards the River, as if it were a round iland, afterwards you shall see the steeple of S. Nicolas, whē that standeth s. & by w. & s.s.w from you, then you are opē before the mouth of the River of Arch-Angel.

For to sail into the River of Arch-Angel.

If you wil sayle in there, then bring the steeple of S. Nicolas a shipps length and a halfe, or 2 shipps lengths to the eastwards of the Crosse sandhill, keepe them so standing and sayle right with them, until that the wood within come midwayes in the middlemost Podesserske, goe on then s.w. & by s., & s.w. for to sail a weather of the tail or showld, which shooteth off from the e. shoare, whē as then the wood within that is the wood upon the n.e. point of the River) cometh to the southermost of the 2 woods, which stand upon the middlemost Iland of the Podesserske, then you are in the mouth of the channel, right upon the showldest of the Bar, the markes of the tayle are, when the wood cometh halfe waies betwixt the southermost & the middlemost Podesserske, when the point of the southermost Podesserske is s. s. e. somewhat southerly from you, then you are without the point of the west grounds. If you bring that point no more easterly from you, you can take no hurt of that poynt. When you are entred the channell, then goe, as is beforesayd s.w. & by s., and s.w. untill that the steeple of S. Nicholas come a shipps length by w. the Crosse sandhil, then further take the founding of the west shoare, & run in by it, towards the foot-strand, & alongst close by it, without going off from it, untill that you come thwart of the white place, or spot, on the west shoare, about the place where it standeth marked in the Card with A. Edge over then from thence e. & by s., & e.s.e. right to the point of the Wood on the east shoare, & on s. e. in alongst by the east land, close alongst by the shoare, but thwart of the 2 Ilands which lye on the starboard side, it is a good wayes alongst the e. shoare somwhat foule & showld, whereof you must take heed, but go al alongst by the e. shoare, untill that you come by the first river on the larboard side, edge thē again to the w. shoar alongst s.s.w., until you cō to the bigt, there it is showld water on the e. side.

Stone reach.

When you are come in the bight, then goe on E.S. east, & afterwards east and by south towards the stonereach, sail through there amidst the channel, alongst by the buyes, which lye in the middest of the deepe, it is on both sides of the buyes uneven and rugged.

When as you come against the stone-reach there standeth a Fishers-house upon the w. shoare, by the litle River that runneth into the land, at the north end, or West end of the stone-reach, thwart of that foresayd house lyeth a great stone under water, which you may sayle about on both sides, it lieth about the middest of the fareway, as you come sayling on, men sayle commonly about to the westwards of it, all alongst by the west shoare, like as also through the stone-reach, for the west side is deepe enough, and at some places somewhat soft ground, but the east shoare is full of rocks.

When as you are past the buyes, then you must keepe off againe, somewhat from the shore. There was wont to lye a litle Iland at the end of the stone-reach, but that is of late yeares altogether skowred away with the Ice. When as you are now through the stone-reach, the course is first S.E. and afterwards S.E. and by S. until you come in the bight, then goe on E. S. E. and keepe yet to the west shoare, untill that you see the towne of Arch-Angel, then saile right towards it, but avoid the point on the larboard side, for it is foule.

Arch-Angel

For to goe from Arch-Angell further up the river to Kolmogro it is about twelve or thirteene leagues most southeast, but the River runneth upwards with many crookked Bights.

Kolmogro.

For to saile out of the River of Arch-Angell, then run out by the foot-strand, and keepe the founding of the west shoare. When as you begin to see the steeple of S. Nicholas, then bring it a ships length to the second or middlemost Podesserske, there lyeth a black Hommock upon the strand. The north side of the wood within, cometh then over that Hommock, then goe on northeast and by north, and northnortheast, towards the Podesserskes. When as then the wood within commeth to the north side of the southermost of the two woods, upon the middlemost Podesserske, then you are upon the showldest of the Barre, but when the poynt of the southermost Podesserske is southsoutheast somewhat southerly from you, then you are at the end of al the showldes and may goe your Course through the sea, where you please, no showlds shall hinder you.

For to sail out of the River.

From the Barre of Podesserske, or from the River of Archangel to the roade of S. Nicholas it is 4 leagues. There standeth a Beacon at the end of the Iland, where the English house standeth upon, by west that beackons is the roade for the English shipps, in 6 or 7 fathom, according as they lye neare or farre from the shoare. The English River lieth in there eastnortheast, & n. east and by east, alongst by the Cloyster of S. Nicholas, but that is so showld a river that no ships can goe into it, men must lade them without with Lodges.

S. Nicholas.

English River.

About s.w. & w. & by w. from the barre of the river of Arch-Angell lyeth the Salt Iland, upon it standeth a Cloyster, & is fast to the main land. This lad lieth of from thēce to the C. Onega w. & by n.

Warsiga.

From the Crosse-Iland to Warsiga, the course is westsouthwest, and west and by south about foure and twenty leagues. Warsiga is a village, lying on a river, where is a Sammon-fishing, which lyeth into the northwards within the land, you can not come into the River with shippes, there is no more then eight or nine foot water, but must stay without in the Roade before the River, there is cleane sand-ground, without any fowle ground, so that you may anckor there without danger, so neare or farre from the shoare as you will.

This River men doe know (when they sayle alongst the coast) by three high Hommocks, which are higher then all the other, and almost of fashion like the three hilles by Bayonne in Galicia, to the northwards of it are white sand-hills with trees upon them. Even by west the three foresaid hommocks goeth in the river.

For to saile from Warsiga to Ombay, the course is alongst by the coasts a litle west, w. & by north, and then w.n.west, afterwards the most N.west, unto the poynt of Tauria 36 or 37 leagues. About halfe wayes betwixt them, well so neare Warsiga as Tauria lyeth on the coast a high bare hill, thwart of it and to the westwards of it lye some bancks, whereof you must take heed.

Poinct off Tauria

The poynt of Tauria is a high steepe poynt full of trees, to the eastwards of this land, the point falleth away into a great Baye farre alongst to the eastwards. About five leagues to the eastwards of the poynt of Taurie, lyeth a rock, a good wayes from land, with is not very great, but very good to be knowne, it sheweth a farre off, as if there sate a great Ape upon it, this rock the Russes call Tourie Babbe, that is to say, Grand-mother of the poynt.

Tourie Babbe.

Whitin that Rock in that foresayd Baye it is all shoulde water, uneven and foule ground, where you may not anckor not have roade, but to the eastwards of the poynt Tauria you may anckor for westerly and northerly windes, somewhat to the northwards of the poynt in the Bight, there it is showld, but by the poynt it is deepe, there you must anckor close by the land.

By the west poynt lyeth the Iland Volna Ostrove, by the Dutchmen called the Reeme Iland. From the poynt Tauria to that Iland, the course is northnorthwest, two leagues.

Volna Ostrove.

Betwixt the Iland and the land of Tauria lieth also a litle Iland, betwixt these 2 Ilands, you may (for need) sayle through with a ship, but it is very narrow, at the N.E. point of Ostrove is roade in 30 fathom, then you lie with the ship, (when he lye wended to the Iland)

in eight fathome, so very steepe and rising is the ground there.

Salt river. From Nolna, Ostrove, or the Reeme Iland to the Couba (that is the salt river where men doe lade, lying a half leagues by E. Ombay, the course is N.N.E. three leagues which lyeth in north, and orth and by east, it is not very broad but deepe, at the comming in is in the middest foure and twenty, and five and twenty fathom, arre wit' ir, five or six fathom deepe, but there it is foule. Men doe comm nly anckor a halfe league wi h in the river on the east side, with an anckor in the middest of the river in sixteen or eighteene fathom, and with a cable on land, there it is good lying with al windes, except with a south S.W. winde, which bloweth there open in.

Ombay. About halfe a league to the westwards of it lyeth the fresh River of Ombay, which is so showld and foule, that men can not goe in there with shippes, except they be small, and also the Russes are not willing they showld come there; for not to spoyle their Sammon-fishing, there is great store of Sammon caught, which is carried from thence with boats to the shipps in the Salt river.

From thence the coast lyeth somewhat alongst west southwest and then upon northwest to Kandalex.

Kierickarick. Kargapol Candenoes. Thereabouts lye also more lade-places, where Sammon is caught, as Kierickarick, and Kargapoll, that lyeth southwest from Ombay, on the Koreels side.

The cape of Candenoes & Orlogennes lie n.e. & s. w. 47 leagues asunder. The poynt off Candenoes is very good to be known, there stand 5 great crosses upon it for markes. When as you fall with it, you may very well perceive, that the land falleth away, on the one side to the S.W., towards the white sea, and S.E. on the other side.

Morsonowits. About 13 leagues to the eastwards of the C. de Candenoes lieth an Iland, called Morsonowits, to the eastwards of it goeth a great Baye into the land, but it is very showld water, with many shewlds & Dwale-grounds. It hath heretofore happened, that some ships have beene here lost, thinking that they run into the mouth of the White sea, for it agreeth very neare with the course, & also with the height of the White Sea, but it is good to know by the land, and to discerne one from the other, for the Russe coast to the eastwards of Candenoes is altogether a land with Sand-hills, and a flat strand, but the coast of Lapland is high and hilly. In this Bay goeth a river through the land, where you can com throug with Lodges into the white sea.

Thwart off this Baye, about 26 leagues east, and east and by south from Candenoes lieth the Iland off Calgoya, being 13 leagues long, you may sayle round about it, but upon the S. side runneth a great riffe alongst the land: they that com from the eastwards must avoyd it, for it is fast to the west end off the Iland. Upon this Iland are great store of Geese, which in the Sommer are altogether bare, or naked, without any feathers, which sit and brood upon one egge, which they have lying under them, and so doe hatch their young one, which are there in such aboundance, that the Russes doe come there a shoare with their Lodges, and lay a deele or boarde upon the land, and drive the Geese with staves, into their boats or Lodges, in such aboundance, that they salt thē into Barrels, in great aboundanc.

Calgoya.

Tussara. From Candenoes to the Iland Tussara, it is eastsoutheast two and forty leagues betwixt them both goeth in the foresayd Baye. By west Tussera lyeth the poynte off Swelgenoes.

Swelgenoes. Colcova. From Tussara to the River of Colcova, the course is east seven leagues, which is a good River, being twelve foot deepe, but there is no other trade, but that the Russes doe come there from Colmogro and S. Nicholas with Lodges, for to trade there, and to barter their wares the for Skins and other wares.

Pitsana. Seven leagues to the eastwards off the river of Colcova, lieth the river off Pitsana, there is but 6 foot water, & is an unknowne place, but a litle to the w.wards of it lieth a should, which you must avoyd: Oliver Bruneel in his voyage frō Nova Zembla com on ground ther.

Pitsora. About 13 leagues to the eastwards of Pitsana lieth the river off Pitsora, which lieth in S.S.E. by the East poynt, and hath 12 foot water, the land is there low with Sand-hills, and upon the west side standeth a pack-house with some crosses. When you come within the river, you must edge up westwards towards the Pack-house, and anckor there in 3, or 4 fathom, there is a great Haff, or broad water. You must avoyd the east side of the river, which is full of Sands and bancks. The litle towne of Pitsora lieth about 35 leagues wit hin the land, there is great aboundance of costly Skinnes and Christall.

Oltgyn. Betwixt Pitsora and Waygats lyeth Oltgyn, and without the Land lye two rocks or little Ilands, the one called Orangien, and the other Grave Maurice, you may anckor under them in six or seven fathom. From the southermost shooteth off a little riffe, but you may sound it well in three fathom.

To the eastwards and to the westwards of the two little Ilands is a great Bay, where it is should water, the land runneth there round to the poynt of Pitsora, all alongst in a Bay off from Pitsora unto the Waygats. It is from Pitsora to Waygats n.e. and by e. 32 leagues.

Waygats. Trayn bay. Waygats, which is also called the Straite of Nassawe is a Straite, where men may sayle through into the Tartarish Sea, it lieth in first about east, afterwards n.e. through about 8 or 9 leagues, about halfe wayes through lieth an Iland, which you may saile about on both sides. A litle within the poynt, on the north side is a fayre Baye, which you may sayle into so deepe as you will, in five, foure, and three fathom, good sticking ground, alongst by the east shoare is the deepest water, there you shal lye sheltered for all winds and ice-drifts.

Through this narrow or strait, hath beene divers times attempted, or undertaken, for to discover, and to finde a way, for to passe alongst to the northwards of Tartaria, unto the richt Kingdomes of Cathay and China, and so forth to the Molucques, but in vaine because of the terrible ice that remaineth there the whole yeare through, and can never melt, by reason of the continuall cold.

Oby. From the east end of the Straite Waygats to Baye off Oby it is E.S.E., and S.E. and by east 40 leagues. To the eastwards of it that land lyeth forth northeast forty leagues more, to the two norther rivers, & then yet so forth alongst n. e. but how far is yet unknowe.

Nova Zembla. The West east of Nova Zembla lyeth to the northwards off from Waygats to Costintsarck N. W. about three and fifty leagues. To the northwards of it the land falleth away, about north and by east to the poynt of Largenes, or the States point, further N.N.E., N. east and eastnortheast to the Iland of Orangien, the northermost part of Nova Zembla, in the height of 77 degrees and an halfe.

Of the Tydes and Courses of the streames, about these foresayd places.

At the North-Cape a Southwest moone maketh high water.
Thwart of the Tanebay a Southwest moon maketh high water.
At Wardhouse a southwest moone maketh high water.
At Kilduyn an eastsoutheast moone maketh the highest water.
At Seven Ilands a southeast moon maketh high water.
At Swetenoes a south and north moon maketh high water.
Alongst the coastes to the eastwards of the north cape the floods come out of the N.W. and northN.W. and rust so alongst the coasts of Lapland, unto Orlogenesie.
At the three Ilands a southwest and northeast moone maketh high water.
At Katsnose point an east and west moon maketh the highest water.
Before Podessemske and S. Nicholas an east and by south and west and by north moon maketh the highest water.
At the Iland of Nova Zembla a southeast moone maketh high water.
From Orlogenes and the three Iland, the flood falleth into the mouth of the White Sea, towards the graye poynte of Catsnose about S.S.west, and S. W. and by west.
But about the poynt of Catsnose, the flood falleth into the white Sea, partly towards VVarsiga and Ombay, and also towards the Podessemske and S. Nicholas.
To the eastwards of Candenoes, towards the Iland of Colgoyen, the flood falleth east and by south, as also alongst the same Iland, and from Colgoyen towards the Waygats, the tyde falleth east and west. Alongst Nova Zembla, the tydes turne about with the moone alongst Rusland they come out of the west and westnorthwest, betwixt Candenoes and Pitsora, and fall so alongst Rusland.
The floods towards Waygats come from Colgoyen and Nova Zembla, and fall together east & by north through the Straite of Waygats towards the River of Obye, so that the ebs and floods doe keep open the channell of Waygats, that they are oftentimes, without ice, or at least but with ice that drives in schooles.
But to the eastwards of the Waygats, the floods come out of the northeast, and fal so into the Oby, and into the Strait of Nassaw, there the water riseth and falleth, but keepeth no certaine tyde.

Of the Depths and grounds both the eastwards & westwards of Waygats.

All the coasts alongst off from Candenoes unto VVaygats, men doe finde a flat rising ground, the most part sand & soft ground. he that must sayl there in misty weather, must know that in 8, or 9 fathom depth, he is 4 or 5 leagues from the coast, but when it is 30, 35, or 40 fathom, then he is farre enough from the land. So it is also alongst Nova Zembla, and also over the east side of VVaygats, but when you come before the Strait, it will be showlder by little and little.

How these lands doe lye one from the other, and from other lands.

From the North- cape to the North-Kyne, east and by south	13 leagues
From the North-kyne to the Tanebay E.S.E.	10 leagues
From the Tanebay or Matkoif to Wardhouse, southeast and by east, southeast and southeast and by south	16 leagues
From VVardhouse to the poynt of Kegor southeast and S.E. and by south	10 leagues
From Kegor to Laus southeast and by south easterlye,	9 or 10 leagues
From Laus to the River of Kool south and by east. and southsoutheast	10 leagues
From Laus to Kild uyn, southeast and by south easterly	10 leagues
From Kilduyn to the poynt of Tierrebirry southeast and by east,	5 leagues
From the poynt of Tierrebirry to the seven Ilands, S.E. and by east	13 leagues
From Tierrebirry to Swetenoes, the coast lyeth southeast and by south	40 leagues
From Swetenoes untill three leagues past Lombascho southsoutheast	16 leagues
From thence to Orlogenes south	9 leagues
From Orlogenes to the three Ilands south	3 leagues
From the three Ilands to Ponnoy, southwest and by south,	3 leagues
From the three Ilands to the Crosse-Iland Soustnowits southwest	20 leagues
From the Crosse-Iland to Catsnose, or the gray poynt southwest	20 leagues
From the Gray poynt to the river of Arch-Angell S. and by west	13 leagues
From the Barre of Arch-Angel to the Salt Iland S.VV. somewhat westerly	7 leag.
From the Salt Iland to the C. Onega west, and west and by north	17 or 18 leagues
From the C. Onega to the Ilands Solofky N.VV. and by west	20 leagues
From the Crosse-Iland to Warsiga VV.S.VV., and west and by south	24 leagues
From VVarsiga unto the poynt of Tauria w.,w. & by n., w.n.w. & n.w.	37 leag.
From the poynt of Tauria to Volna Ostrove, northnorthwest	2 leagues
From Volno Ostrove to the Couba to the eastwards of Ombay N.N.E.	3 leagues
From Ombay to Kandalex N.VV. and by west	13 leagues
From Orlogenes to the cape de Candenoes, the course is N.E.	47 leagues
From Candenoes to the Iland Colgove east and by south,	16 leagues
From Candenoes to Swelgenoes a S. E. and by east	29 leagues
From Condenoes to the Iland Morsonewits S.E.	13 leagues
From Candenoes to Tussara it is E.S.E.	7 leagues
From Colcova to Pitsana E. and by N.	7 leagues
From Pitsana to Pitsora E. and E. and by N.	13 leagues
From Pitsora to VVaygats, the course is about N.E. and by east	14 or 16 leagues
From Catsnose to the Ilands of Solofky west or somewhat more southerly	37 leagues
From Catsnose to VVarsiga N.VV. and by west	16 or 17 leagues
From Catsnosa to Polongi N.VV. and by north	23 leagues
From the Ilands of Solofky to Ombay in Lapland north	32 or 33 leagues
From Solofky to VVarsiga E.N.E.	31 leagues
From Solofky to Polongi N.E. and by east	50 leagues
From Candenoes to Costintsarck in Nova Zembla N.E. & by east about	60 leagues
From the east end of Colgoyen to VVaygats east	60 leagues
From Pitsora to the east end of Colgoyen westnorthwest,	43 leagues

Heights.

The Iland Kilduyn lyeth in 69 degrees, and forty minutes. The poynt of Catsnose or the Graye poynt lyeth in 65 degrees S. Nicholas or the River of Arch-Angell in 64 degrees 30 minutes The Iland of Solofky in 65 degrees Ombay in 66 degrees, 45 minutes Cape Candenoes 69 degrees, 30 minutes The Iland Colgoya in 69 degrees, 10 minutes The River of Colgoya, Pitsana, and Pitsora lye in 68 degrees, 30 minutes VVaygats or the straite of Nassow lyeth in 69 degrees 43 minutes.

The

~~The Second Booke~~ Third,

OF THE NEW,

FYRIE COLOMNE,

Of the EASTERN NAVIGATION.

THE ~~THIRD~~ Second PART

~~Book~~

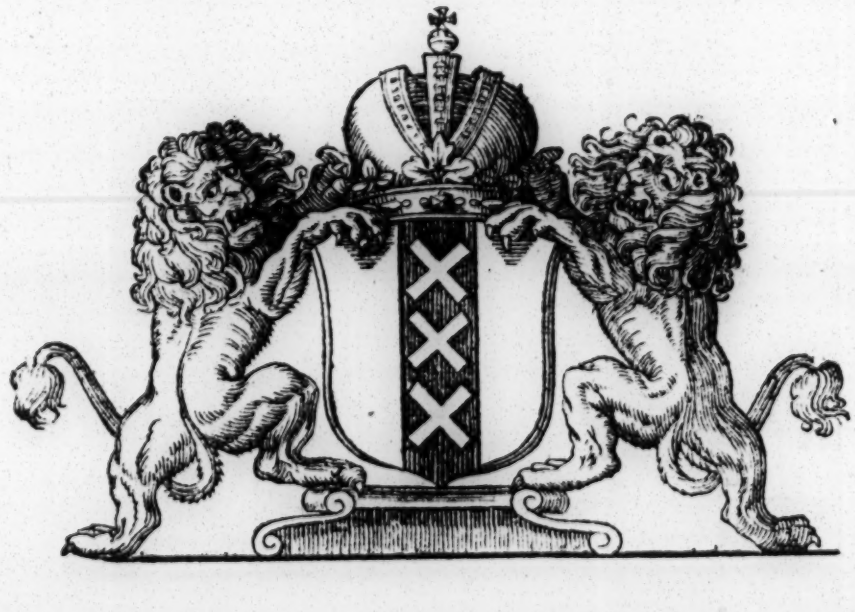
wherein the Deſcription,

Of the whole

EAST-ZEE.

Which is ſeth forth, With previledge of the HIGH, and MIGHTY Lords, the States Generall, for 18. yeares.

Being very ſerving-able for all Mariners and Pilots.



Printed at Amſterdam,

By Iacob Columne, on the Water, in the Firie Columne.
Anno M. DC. XLIX.

SWEDEN

NOORD

BODEM

Stockholm

Noordkoppen

Gevel

Schelfsgr

Danswycker gat

Copersteen

Gottenburgh

Göteborg

Monsterstadt

Waarsteegen

Wallenburgh

I. Tulee

Lethoim

I. Swederot

DENEMARCKEN

Calmen

Elsenburgh

Landscroon

Somerhaven

Elbogs

Malmuyen

Scaney

Falsterbon

Drulborgh

Goeseberg

Ahuys

Engelholm

Helsingborgh

Cerholm

Bornholm

Stettyn

Dantzigk

POMEREN

Brunsbuttel

Fischhausen

Lierksteden

Brandenburgh

OOST FINLANT

LIF

LAND

COERLANT

PRVYSSEN

PASCAERTE VANDE OOST-ZEE NIEULIX WTGEGEVEN Door Iacob Colom.

Duytsche mylen 15 in een graedt Lieues d'Allemai 15 en un degre

Spaensche mylen 17½ in een graedt Lieues d'Espame 17½ en un degre

Engel en Fr. mylen 20 in een graedt Lieues Angl et Fra 20 en un degre

SCHONEN

De Cuſten *van* Schoonen *en* Swede
van Valſterboen *tot* Chriſtianopolis
Bornholm *en de* Cuſten *van* Pomeren
van't Eylant Rugen *tot* Rygs-hooft

Tot Amſterdam
By Jacob Aertsen Colom

Les Coſtes Maritimes
de Schoonen et Suede
de Valſterboen à Chriſt
ianopolis. et Bornholm
et Pomeren de Iſle de
Rugen à Rygshooft
Par Iaques Colom.

P O M E

GODT

LANDT

OELANDT

Groen Eylant

Engelsche

Hendtberch

Reffel

Wlfacken

Lysba

Sernevisa

CASTILIEN

Ruwalde

Duijtsche Mijlen 15 in een Graad. Lieues d'Allemai 15 en un degre

Spaensce Mijlen 17½ in een Graad. Lieues d'Espaigne 17½ en un degr

Eng. en Franse Mylen 20 in een Graad. Lieues Angl. et Franc. 20 en un deg

MUSEUM

The third part of the Firie Colomne.

THE THIRD BOOKE,

Of the

EASTHERN and NORTHERN NAVIGATION

Containing

The deſcription of the whole Eaſt Sea.

The firſt Demonſtration,

Where in Are deſcribed the Sea-coaſtes of Valſterboen to Chriſtianopolis, and from the Iland Rugen to Ryghs-head.

Elburgh.

HOu men ſhal ſaile about the riffe of Falſterborn hath been here before rehearſed. The coaſt from Falſterborn eaſtwards lieth moſt eaſt and by north, ſomewhat northerly. Firſt from Falſterborn to Elburgh are three leagues. If you will anckor before Elburgh, then bring the Cloyſter and the Church within a fathom or a fathom and a half near one to the other, and ſaile ſo right in unto the town, you may anckor by it in four, three, or two fathom and a halfe.

Wtſtee.

From Elburgh to Wtſtede are ſeven or eight leagues. Betwixt them both about three leagues to the eaſtwards off Elburgh, and five leagues to the weſtwardes of Wtſtee is a point, off from which lieth a ſhoulde, come no nearer it then eight or nine fathom. Wtſtee lieth in a bight, and hath a high ſharp ſteeple. If you bound there, then bring the ſteeple north from you, and then ſaile in right with it towards the ſtrand; there ſtandeth a red tiled houſe to the eaſtwards of the bridge, bring that houſe and the end or the bridge one in the other, and ſaile in ſo, and runne to the weſtwardes of the bridge, and ankor there in three fathome, or two foot leſſe, there is cleane ſand-ground. When you come from the weſt, and are paſt that foreſayd ſhould, then you may bodly runne alongſt by the ſhoare in three fathom and a half, without feare.

Goesbeer.

Three leagues to the eaſtwards of Wtſtee lieth a high point called Goeſſebeer, from thence to the Sandhammer is a league.

Sand-hamer.

From the point off Goeſſebeer runneth off a great ſhould farre to ſeawardes, and lieth alongſt the coaſt, unto neare Sandhammer, you may ſound it in ſix, eight, and ten fathom, as you will. When you runne over it in terne fathom, then lieth the north-end of Bruntholm about eaſt from you, and the point off Sand-hammer northnorthweſt. Under the Sand-hammer is good anckoring for a weſt, weſtſouthweſt weſtnorthweſt, and northweſt winde, in five or ſixe fathome. When you come out of the northeaſt, you may runne along by this coaſt, with a northweſt winde, in ſeven, eight, nine, or twelve fathom, untill paſt Goeſbeer, for to avoyd Bruntholm.

The point of Goeſbeer and the north end of Bruntholm lye northweſt and by weſt and ſoutheaſt and by eaſt about five leagues aſunder, but Wtſtee and the foreſayd north-end off Bruntholm northweſt and ſoutheaſt eight leagues aſunder.

For to ſaile from Falſterborne about to the northwards of Bruntholme you muſt go on eaſt, ſo long untill that you have the length off Wtſtee, then forth eaſt and by north, and then you ſhall ſaile yet neer enough to the pointe and ſhoulde of Goeſbeer, come no nearer it then ſeven or eight fathom. But to ſaile from Falſterborn to the ſouthwards of Brontholm, the courſe is eaſt and by ſouth, two and twentie or three and twentie leagues, and alongſt the ſouthſide off Brontholme eaſtſoutheaſt.

Bfont-holm.

The Iland Brontholiem is clean round about, except on the ſoutheaſt point, there runneth off a foule riffe, called Brewers rif, which men muſt avoyde. On the northeaſt ſide you may runne alongſt by it upon your lead, without doing amiſſe, in 12 or 13 fathom, and alongſt the ſouthweſt ſide in 8 or 9 fathom.

Rõade under Brontholm.

Men may anckor round aboute Bronthollom, at divers places, as before Rottum, & to the northwards, before the Caſtle, thwart of Sandtwick, Suaux and Nex.

Rottum.

Before the Village, betwixt Rottum, and the caſtle that ſtandeth upon the northweſt point, is a good anckoring for an eaſt or northeaſt winde, in 13, 14, and 15 fathom, but not verie cleane ground.

Thwarte of the Caſtle it is good lying for an eaſtnortheaſt, eaſt, and eaſtſoutheaſt wind in eightcene and twentie, and alſo fourteene and fifteene fathome, ſand grounde, but nearer the ſhoare the ground is not verie cleane, the nearer to the ſhoare the fouler ground.

Sandwick.

Under the northweſt pointe before Santwick there is good anckoring for ſouthweſt windes, and you may come neare unto that point. From the northweſt point to the other pointe the ſhoar lieth eaſtſoutheaſt and weſtnorthweſt.

Nex.

On the eaſt ſide is good anckoring before Suaux and Nex: but before Nex it is not verie clean. By Nex runneth off a little riffe from the ſhoare, which is ſteepe on both ſides: but if you come no nearer it then in tenne fathom, you can take no hurt of it: to the northwardes of Nex lieth alſo a great rock He that will anckor before Nex, let him anckor ſo, that the flat ſteeple which ſtandeth above Nex, doe ſtand betwixt the weſt and weſt and by ſouth from him, and that the north pointe be north and by weſt, and the ſouth point be ſouthſouthweſt from him, there it is two and twentie fathom deep, and cleane ſand ground. At many other places it is otherwiſe ſtonie and rough ground, with ſouthweſt and weſt winds you have there a weter ſhoare.

The Eertholmes lye from the north-end off Bruntholm eaſt and by north and weſt and by ſouth foure leagues aſunder, and from the ſoutheaſt end ſouth and north five leagues. In the Eertholms is a little Haven, but by reaſon that is not uſed it is unknowen.

Showlde by Bront-holm.

Betwixt the north point of Bruntholiom and the poynte off Sand-hammer, but neareſt to Bruntholiom lyeth a ſhowlde of ſix fathom, where ſometimes Fiſhermen doe lye to fiſh, it is not verie great, but hard ſtonie ground.

From Sandhamer the coaſt lyeth northeaſt and by north a league to Somer-haven, this a round bay, within it is very good anckor ground. From thence the coaſt lyeth about north five league unto Ahuys. From the north poynt of Bronthollom to Ahuys, the courſe is north ſomewhat northerly about ten leag. But to Hanno north, betwixt 11 or 12 leagues.

Ahuys lyeth upon a river, where ſometimes is before the towne 10, or 11, and ſometimes alſo no more then four, or five foot water, according as the water commeth out of the land, upon it is a great fiſhing, where in the ſommer time are great ſtore good Eels taken. To the eaſtwardes of the mouth of the River runneth of a ſtony flat from the ſhoare, and to the ſouthwards of the river a foule ſtony riffe, right off from the ſhoare alongſt by the foreſaid flat, ſo that there lyeth in a channel betwixt the foreſaid flat and riffe, which is called the Eaſtergat.

Through this foreſaid riffe lyeth in a channell until into the Eaſtergat, on againſt the flatte, which is called the Southergat. If you will ſail into this ſouthergat, comming from the ſouthwards, then runne to the weſt ſhoare to the ſouthwards of Ahuys, untill you come in 5 or 6 fathom, & then you ſhal ſee upon the north ſhoar, north and by weſt or ſomewhat more weſterly from you, a cape or beacon ſtanding a little from the ſtrand within the land, of faſhion like a mill without wrings: Bring this beacon to the weſt ſide of the high Hill, which lieth ſomewhat further into the Land, to wit, even in the going off the higheſt of the hill, keepe theſe markes ſo ſtanding, and ſail in rigt with them, until that Ahuys commeth over that tree, which ſtandeth there at the north end of the wood, or that the white Countrie-church come to the northwards of the little houſes of Ahuys, then goe on northweſt, or bring that foreſaide white-countrie-church in a little valley, a little to the northwards of an old ruined caſtle, where of there ſtandeth yet ſome of the walls upon the north ſide of the River, and ſail ſo on, untill that Ahuys come to ſtand in the middeſt of the River, anckor there in two fathom and an halfe, or three fathome, there is the roade there can goe noo ſea. In this ſouthergat it is two fathom, 2 fathom and a half, and ſometimes alſo at leaſt 3 fathom deep.

Easter gat Ahuys.

For to saile into the Easter-gatte, comming from the southwards keepe in sixe or seven fathom, and runne so the north shoare, and then you runne alongst without the riffe, that lyeth of by south the rivers mouth from the west shoare untill that Ahuys doe stand rigt west from you, then there commeth a great tree to the north side of the wood, that standeth upon the west shoare, keepe that so standing and runne in right with it, untill that foresaid countrie-church come to that foresaid old peece of wall, of the old ruinous castle, and then right in, as hath beene before said. Or runne in by the first markes, untill within a shot of a cast peece neer to the west shoare, and then edge up to the north shoar, untill that Ahuys come in the middest of the River, and anckor there, as hath is been said.

Hanno.

Hanno is a little high round Iland, which men may saile round about, under it is good roade for south and southeast windes.

Behind Hanno runneth up a little River to Sel brough, but serveth onely for small ships or Crayers, which go not deepe.

Fleholm, Rottenbuy

From Ahuys to the Rockes the course is east and by south twelve or thirteene leagues, betwixt them both lye divers little townes, as Fleholme and Rottenbuy, where men may anckor before, in sixe, seven, and eight fathom good anckor ground: And other Havens more, but litle or nothing knowne by Hollanders. Thwart of Rottenbuye lyeth a great Rocke somwhat off from the land, called Malqueren, under which men may also ride.

From the north poynt of Brunthollom to the Rocks the course is northnortheast sixteen leagues, but from the point of Sandhamer eastnortheast 17 leagues. If you runne alongst close by the north poynt of Brunthollom, you shal run with a northwaye, alongst even without the rocks: But it, of you run alongst close by the poynt of Sandhammer, and will saile from thence to the Rocks, you shall with a northeast and by east waye fall with the Land even within them, orto the westwardes of them.

Therocks.

The Rocks are som little rocks together, which men may saile round about, but can have no Roade under them; they lye three or four leagues distant from the maine land, and are smaller then the Eartholmes.

A league or two to the northwardes of them lieth the Vrouwen or Greene Iland, by some called the Rough-Iland, and also the Outlyers: It is not so brocken in it selfe as the Rocks, and also much greater, off to seawardes from it, lye some rocks, to the westwards of it, it is al full of rockes, some above and some under water, alongst even fast to the Land, you may saile about within the Greene-Iland betwixt, it and the rockes, but no man can doe it, but he must be verie well acquainted there, and then also not without great daunger. To the southwardes of it you may also finde Roade at some places, but you must be verie wel acquainted, and also not without daunger, by reason of the multitude of suncken rocks and sharp grounds. The east side of the Outlyers lye from the rocks northeast and by north. The south

Oeland.

end of Oeland is a sharpe pointe, and lyeth from the rockes east and west about eight leagues distant. Thwart of it, betwixt the mayne land and the aforesaid south poynte of Oeland, it is about four leagues broad, betwixt them both goeth in the Calmer-sounde.

For to saile up into the Calmer sound, then goe on from the rockes, or from the Outlyers northnortheast, and then you run in betwixt Oeland and the maine land, sayle in there betwixt them both, a middest the channell, both the shoares are verie foule but if you come not nearer them, then in seven fathom, you can take no hurt there.

From the Rocks to Calmer are fifteen or sixteene leagues: About halfe wayes betwixt them, Northwest from Southerorden, the southermost point of Oeland lyeth the towne of

Christianopel.

Christianopell, lately builded there upon a little Ilands by Kings Majestie of Denmarke, and so called after his name. Thwart of it was wont to lye upon the mayne land a little town

Overschaer.

called Overschare, now it is one with Christianopel, thwart of it lyeth a ledge of rockes about a great English mile off from the shoare southeast into the sea, come no nearer it then in ten fathom.

At Christianopel is a haven on the east side, from it lyeth off a riffe towards the northeast into sea; therefore he that will sayle in there, must come in from the northwards for to avoide this riffe.

To the northwardes of Christianopel towardes Calmer, it is on both sides (as well on the side of the mayne land, as on the side of Oeland) all full of rocks and foule grounds, but you may sound both the shoares: in the middest betwixte both in the farewaye, it is tenne and twelve fathom deep, all soft claye grounde, to the southwards of Christianopel it is deeper, but to the northwards towards Calmer it is by little and little shoulder.

Two leagues to the northwards of Christianopel lieth Berckenhaven, there men doe lade oken beams, there-within it is good lying, but verie badde for to come in or out, because of the multitude of suncken rockes, and other foule grounds, which lye before it about a half league off from the shoare to seawards.

Berckenhaven.

Hosmes grounde.

Aboute a league to the northwardes of Berckenhaven lyeth Hosmes ground, which is a verie bad foule ground, lying somewhat farther off from the shore to seawards, then the other rocks which lye alongst the shoare, thereof you must take heede.

Steensoe.

About a league to the southwardes, and two leagues to the northwards of Hosmes grounde lyeth a poynt called Steensoe, which is a somewhat high rough and verie foule poynt, a halfe league long, lying within, a halfe league neare to the towne, to the westwardes of it runneth in a great bight, where is good lying also for many shippes, but you can not come in there, because of the manie foule grounds and dangers, except it be with a verie skilful Pilot: upon the west side, over against the pointe standeth a white house. The King of Denmarks armie of ships laye there, in the time of the last siege of Calmer.

Castle of Calmer.

When you come so farre in, that you leese the south-end of Oeland out of your sight, then you gette the Castle of Calmer in sight, sayle towards it but shunne the shoares, as hath been sayde here before. The Castle hath four great towres, when the two eastermost of the four come one in the other, then is the Castle about northwest from you, then you come by the

Grimschaer.

Grimschaer, this is a Rock good to be knowne, upon it standeth a mast, with a Barrell upon the toppe of it, which lyeth much nearer the west shoare then Oeland, when you get it in sight, then sayle towardes it. Thwarte of the Grimschaer or Tonholm lyeth a suncken rock, about a cables length off from ir, and a little more to the eastwards, upon it is no more then five foot water.

The farewaye is through, betwixt this suncken rock and the Grimschaer about northeast and by north, sayle close alongst by the Grimschaer, leaving it on the larboarde side, and then the foresayd suncken Rock remayneth on the starboard side of you.

Being a little past the foresayde suncken Rock, and Grimschaer, you come then on against the west end of a long small rock, which lyeth farre to the eastwardes, towards Oeland, and lyeth almost even with the water, at some places a little above water, and at some places the sea runneth alongst over it, edge then a little up to the northwards, and runne about by the point off that rock; Being past that, you shal meet on the larboardside a low rock, from the which there shooteth of a litle taile to the northwards, upon it standeth a little beacon, sayle alongst by it, and being a little past it, then shall the towne lye westsouthwest from you, let your anckor fall there in five or sixe fathom, there is the right road. If you come to anckor somewhat northerly in the roade, you must be care full to take heede of a suncken rock which lyeth no more then eleven or twelve foot under water.

Suncken rock.

The markes of this suncken rock are these: When the milles upon the Mulholm are one in the other, with the mill which standeth on the north side without the towne, then you are thwart off the foresayd suncken rock; On both sides of it, as wel to the northwards as the southwards of it, it is deep enough. It is good lying there, almost with all windes, but a north and by east winde is the worst, which bloweth there in open. With shippes that go not deeper then sixe or seven foote, men may come to lye at the bridge before the towne.

You may also saile to the westwards of the Grimschaer: that is, through betwixt the Grimschaer and the land, with shippes that go no not deep, but he that shall doe it, must be verie well acquainted there, for there it is all full of Rocks, some above and some under water.

The riffe of Southerorden.

From the south end of Oeland, called Southerorden, lieth of a great dangerous riffe a league and an half into sea, there it is seven and eight fathom deep, when the Chappel upon Southerorden is northwest a great league from you, there it is ten and eleven fathom deepe; you may sounde about this riffe in eight or nine fathom, but it is not good to come nearer it, when you can doe otherwise, and can passe it.

The east coast of Oeland is a cleane coast, and lyeth north northeast, and southsouthwest.

Of the Iland Rughen.

For to saile out at the Ielle.

To the westwards of the Iland Rugen men doe sayle up into the Ielle unto Straelsound. For to sayl from Straelsound out alongst the Ielle, goe on north, and north, and by west, there lyeth

lyeth a Middle-ground, ſometimes there ſtandeth a beacon upon it, and ſometimes not, leave that on the larboard ſide, being paſt that, ſayle to the poynt where the wood ſtandeth upon, ſo that the town come behind the wood, you ſhall then ſee a verie high tree, bring that over the flatteſt ſteeple, and keep it ſo a while ſtanding, going on ſtill north, and north and by weſt unto the beacon the Ielle. When as you loſe up about by it weſt, then looke out for two trees, which ſtand upon the eaſt ſhoare, ſomewhat within the land, bring them a ſhips length without the higheſt tree, which ſtandeth upon the ſhoare, and looſe up aboute the beacon, towards the buye. In the mouth of the deepe lye three buyes, which in ſayling out you muſt leave all on the larboard ſide, but in ſayling in all on the ſtarboard ſide. It is not deeper in the mouth of the Deepe then ſixe and ſeven foote, and alſo without, it is farre of ſhoulde water.

The Iland Rugen hath four points that lye out, under which men may ride at divers places, as Doornboſch, Witmondt, Iaſmondt and the Peert.

Dornboſch. The poynte of Doorenboſch lyeth from the Ielle north and by weſt diſtant two leagues, it is high land with a ſteepe poynt, men may ride under it for northeaſt, eaſt and ſoutheaſt windes. If you will anckor there, then anckor in three, four, or five fathome, ſo that the ſteepe point ſtand northnortheaſt from you, or that the Church ſtand over the point, or anckor where about that it ſhall pleaſe you, or ſhall be beſt convenient, it is there all over ſhallow water and clean ſand-ground.

From Dornboſch to Brontholme, the courſe is northeaſt and by eaſt, 17, or 18, leagues, but Dornboſch and Falſterbornes Riffe lye northnorthweſt and ſouthſoutheaſt, fourteene leagues aſunder.

From Dornboſch to Witmondt, the courſe is northeaſt and by eaſt four leagues. Betwixt them both goeth in a greate Bay, where you may run in alongſt by Witmondt, and have roade there in five or ſix fathom, for ſouthweſt, ſouth, and alſo for an eaſt winde.

Roade under Witmondt. If you will ſeeke roade under Witmondt for weſterlye windes, and runne about by the poynt comming from the weſtwardes, then come not nearer the poynt, then ſeven or eight fathom, there ſhooteth off an uneven ſhoulde, which you muſt avoide, being come about the poynt, anckor there in twelve, thirteene, or fourteene fathome, that is aboute a league from the ſhoare, nearer to the ſhoare in ſeven, eight or tenne fathom, the ground is not cleane, in twelve fathome you have groſſe ſand, in thirteene or fourteene fathome ſoft ground, ſo that with harde windes you ſhould neede to ſhoe your anckor, you lye there alſo landlockt for a weſt and ſouth winde.

Roade under Iaſmondt. Jaſmondt lyeth from Witmondt eaſtſoutheaſt diſtant three leagues.

If you will anckor under Iaſmond, for a weſt or weſtnorthweſt wind, then ſaile ſo for about the point, that it come to be northnorthweſt, or ſomewhat more northerly from you, when you come about the point, you ſhall ſee in the ſouthweſt or ſomewhat more weſterlye from you, a little thick wood of trees, upon a plain hill, and on each ſide of that little wood, a little ſharpe ſteeple, and alſo a great tree, like as if it where a mill without wings, when that tree commeth to be ſouthweſt, and by weſt from you, ankor there in nine or ten fathom, there is in different ground, according as the grounde is there, by the point of the land, it is about 13 fathom deep.

Or bring the north point northweſt, and the other point ſouthweſt and by ſouth from you, and anckor there in tenne or eleven fathom, there it is good ſoft ground, but it laſteth not long, ſo ſoone as you finde the ſoft ground you muſt let fal your anckor, for the ground is there at manie places not cleane, or you muſt ſayle farre about both the points, there you lye landlockt for a northweſt, and northwinde, in 10, 11, or 12 fathom, good ſoft ground.

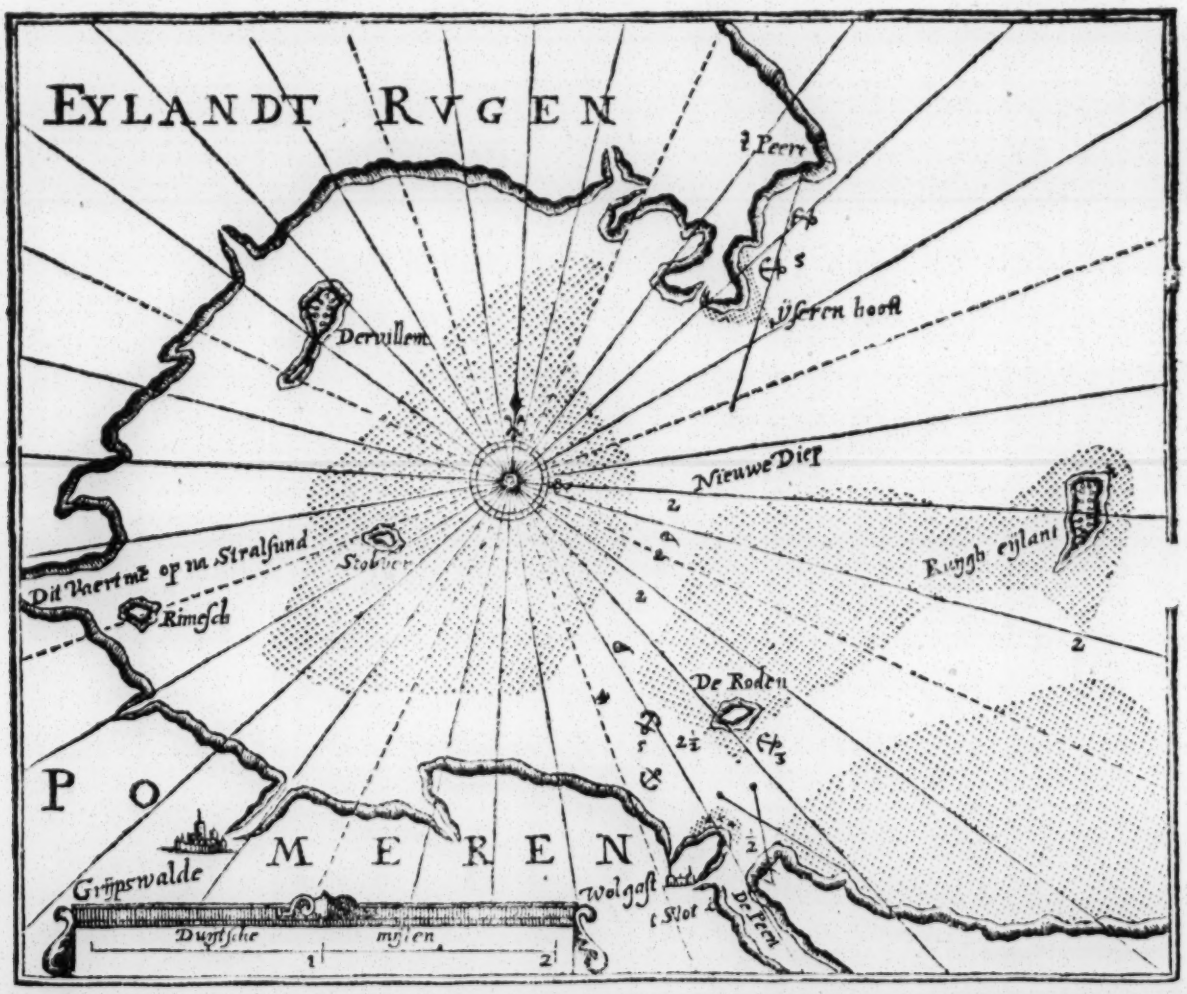
The Peert. The Peert, which men doe alſo call the great Buck upon Iaſmondt, is a tuffe of trees or two, and is a pointe that lieth out with two points, where is betwixt them both a faire Sand-bay, where is good lying in four or five fathom clean ground.

Iaſmoundt and the Peert lie ſouthſoutheaſt and northnorthweſt diſtant three leagues.

To the ſouthwards of the Peert goeth in that New deep, where men doe ſaile through to Statyn.

For to ſail into the New deep. About a league ſouth, ſomewhat weſterlie from the Peert lieth a pointe, called the Ironhead, there lieth off a little riffe, therefore you muſt run alongſt ſomewhat without that point, and being a little paſt that point, you can ſee the outermoſt buy of the New-deepe, wherein lye two buyes in the middeſt of the deepe, ſo that you may ſaile alongſt on both ſides of the buyes, but with ſhippes of great draughts, you muſt cloſe along to the eaſtwards of the buyes, there is the very deepeſt of the channel. By the outermoſt buye it is at the ſhouldeſt, there is the barre, commonly there is eleven foot water, or a little more then 11 foot and a half, and ſometimes alſo well twelve foot, but in the middeſt off the mouth of the deep it is commonly ſtill twelve foote, and ſometimes more.

The New-deepe.



Upon the Peert lie three high hommocks, the weſtermoſt of them is the greateſt, one great round hommock, when you keep that right without the Ironhead, and then run on ſouthſouthweſt then you can not ſaile amiſſe, although there were no buyes in the mouth of the Deep.

When you come over the Barre, you ſhall finde againe four and five fathom depth, being a little over it, you muſt go on ſoutheaſt unto the entrance of the Peen, with that courſe you leave the Iland of the Roeden lying at leaſt two cables lenghts on the larboard ſide. It is there all over good anckoring.

The Roeden. If you will ſaile into the Peen you ſhall eſpie (ſailing thus right out a head at the eaſt ſide of the Peen, two pointes, keep

the eastermost a handspikes length without the westermost (for to avoyd a stonie should, which runneth off from the west point of the Peen) untill that you come before the Peen. Upon the east shoar stand two beacons, bring them one in the other, and run so into the Peen, which lyeth in first southwest but in the comming in, there is no more then sixe foote, or six foot and an half water.

Roade under the Roeden. If you will anckor under the Iland the Roeden, you must be mindfull of a little riffe, that lieth off from the Roeden to the southwards, towardes the mayne land, anckor there, either to the westwardes or to the eastwardes of it, accordings as the winde shall be, in three fathom, or two fathom and a halfe, so shoulde or deepe, as you please, there is the common roade for the ships.

Rough Iland. The Rough Iland lyeth from the Roeden northeast and by east distant about two leagues.

For to saile out to the eastwards off the Roede. About eastnortheast from the Roeden lieth also a channell into the sea, a little to the southwardes of the Rough Iland, that is good for to runne out with westerly windes, when you can not come out at the New deep, & also for those that are bound to Danske, or to the eastwards. From the Rough Iland lieth off a little riffe to the southwardes, which you must avoid, and runne through betwixt that & the shoulde which runneth from the shoar, thwart off it is the barre or shouldest off this channel not lesse then eleven or twelve foot water, that is a short out let, being over you shall gette presently deeper water. This channell is Pilots water. Upon the Iland the Roeden dwell Pilots, which doe bring out the shippes there. The Coast of Pomeren lieth from the New deep to Colbergen east and west about sixteene or seventeen leagues.

Swin. Betwixt them both lye yet two channels, the Swinne, & the channell of Camin. The Swin lieth seven leagues eastwardes from the Hewdeepe, which runneth through with a litle River into the Haff or broade water, right over against the River of Stetyn Camin lieth five leagues to the eastwardes of the Swin, upon the east end of the Hafle or broad water of Stetyn: that channell goeth through also with a river into the Haff.

Camin. Four or five leagues without the land, when Iasmondt is west, or thereabout, the Peert west southwest, and the Rough Iland southwest and by west from you, there lieth a banck of seven fathome, upon one place somewhat lesse, and upon an other somewhat more, betwixt it & the land towards Iasmondt it is again thirteen, fourteene and 15 fathome deep, but to the eastwardes of the New deepe, alongst by the coaste of Pomeren, it is all shoulde water, off four, five, sixe and seven fathom, so farre into the sea, that when you can but even see the land of the Swin, there it is not deeper then seven or eight fathom, without sight of the land it is 12 and 13 fathom deep.

Banck. The New-deepe and Colberghen lye east and by north and west and by south 16 or 17 leagues asunder.

Colbergen The Haven of Colbergen you must saile into between two heads, untill you come before the Towne Within in the river, right over against the town, lieth a Well or Brook which can give all the countrey thereabout salt, off water which they seeth, and yet the water of the river is fresh as Milk, for it is a little water that commeth out of the land. The coast of Pomerland lieth from Colbergen to Gasthead eastnortheast and westsouthwest aboute 13 leagues, betwixte them both lie two havens more, to wit, Coslyn and Ruwolde.

Coslyn. Ruwolde. The haven of Coslyn lieth from Colbergen northeast and by east four leagues distant. And from Coslyn to Ruwolde, the course is northeast and by east five leagues. Into the haven of Ruwold, or the little river, called the Wipper, an indifferent ship may go in. It is from Ruwolde to Gershead northeast and by east four leagues.

The Stolp. The land lyeth from Garshead to the Rosehead east and east and by north 19 or 20 leagues, betwixt them lye the havens off Stolp, Liba, and Sernevis.

A little to the eastwards of Garshead lyeth the haven off the Stolp, which is a river so called as the towne, which runneth up to the same towne, onely for smal ships, although that there doe indifferent great ship lade.

From Garshead unto Reefcoll it is all a white Strand, and lyeth eastnortheast from it foure leagues. Reefcoll is a high round hill very good to be knowne, when you come of from Bronthollom. From Reefcoll to Liba it is seven leagues.

Liba. Sernevis. Liba lieth upon a great river, called the Osse. From Liba to Sernevis are five leagues, betwixt them lye the three Woolsacks, which are three black tuffens of trees, where by this land is very good to be knowne, a little to the eastwards of these three little hommocks lyeth a long hill which doth shew it selfe (when you come out of the west) on the west end divided into three or foure little hommockes. Seven or eight leagues to the eastwards of the Woolsackes followeth the high land of Rose-head, which is very steep upon the water side. Betwixt the Rose-head and Reefcoll it is all white strand, and most of the land grown with trees.

Sernevis. Sernevis is a little towne lying upon a little off water which with a little river runneth into the sea, but within, it doth spread it selfe into a great river. It is from Sernevis to the Rose-head four leagues.

You may sound aboute the Rose-head in 15 and 20 fathom, and also you may well anckor under the Rose-head, there is better ground then under the Heel. All the strand off Pomerland is alongst the sea side above all black with trees.

Of the Depths.

In the farewaye to the northwardes off Bronthollom alongst to Rye, it is deepe betwixt Oeland and Bronthollom five and thirtie, sixe and thirtie, and eight and thirtie fathome, but comming against Oeland, so that the south end come to be northwest and by north, northwest, and northwest, and by west five or sixe leagues from you, there you shall finde verie uneven grounds. Southeast five or sixe leagues from Southerorden, are grounds of nine, tenne, twelve and sixteene fathome, in the nine and tenne fathome soft ground, that there remayneth nothin upon the lead, but in the fourteene or fifteene fathom, it is grosse redde and black stonie sand ground, almost like gettes. Nearer againe to Oeland it is againe deeper water, and farther from the land it is also deeper, but all uneven ground; the south end of Oeland, being about northnorthwest from you eight leagues, there it is againe sometimes twentie, fourteene and also well tenne and nine fathome in the shouldest deepe, all stonie ground, that there remaineth nothing upon the lead, but in twentie and five and twentie fathome grosse red and black stonie sand. He that sayleth with a northerly wind over these foresaid shoulds, of teen, eleven and twelve fathome, and is bound to Bronthollom, let him gee on westsouthwest, for to sayle clear of Prontholm, if he recken to come against it by night: the Bleesche side he may bouldly runne to by the lead in seventeene and eighteene fathome. The poynt of Sandthamer runneth farre off flat, at hath been said here before, you may runne aboute by it in seven and eight fathome.

Betwixt the Rockes and Oeland, in the farreweye to Gotland it is eight and thirtie, and nine and thirtie fathome deepe, easie clay ground.

When Southerorden is northnorthwest, somewhat northerly a league from you, there it is thirteene fathom deep.

When the little chappell upon Southerorden is westnorthwest from you two leagues, there it is thirtie fathom deep.

When Southerorden lyeth west two greate leagues from you, there it is seven and twentie, eight and twentie, and nine and twentie fathom deepe.

Betwixt Fasterborne and Brontholme it is thirtie, and five and thirtie fathom deep, in the fairewaie, but when you beginne to come neare Fasterborne, there it is shoulder water of fourteene, fifteen and sixteen fathom.

When you (comming from the west) sayle alongst by the south side of Brontholm eastsoutheast about a league without the land, and that the east ende of Brontholme is east, somewhat southerly about two leagues from you, there it is deep 7 or eight fathom grosse pale sand, that lasteth untill that the forresayd eastende be east, & east and by north aboute a league and a halfe from you, all in one depth, but when it commeth to be eastnortheast from you, it is fifteene fathome deep, small balckish sand-ground.

Four or five leagues from Brontholme, when the east end (from which Brewis-riffe runneth off) is aboute eastnortheast or northeast and by east, and the north ende aboute north, or north and by east from you, there lyeth a banck off seven, eight or nine fathome, and lyeth northwest and southeast more then a great league long, the southermost ende lyeth about southwest from the east ende of Brontholme. He that meeteth with this banck by night, may make some gessing thereby, for to direct his course thereafter, wheter he be bound eastwards towardes Reefcoll, or towards Fasterborne.

About two leagues eastsoutheast from the aforesayd east end of Brontholme (to weete the lowe sand poynt, where Brewersriffe lyeth off, of there it is four and twentie and five and twentie fathome deepe, stonie ground.

About four leagues east, somewhat northerly, or east and by north from Meun, lyeth a banck off eleven and twelve fathom, which lasteth from thence with a northwest and by west course, untill that Meun come to be westsouthwest, or southwest and by west from you, then it is again eighteen, nineteen and twentie fathom deep, soft ground.

Faster-

Faſterborne ſhall then be northnorthweſt and Steden weſtnorthweſt from you, going on with that ſame northweſt and by weſt courſe, you ſhall then get by little and little ſhoulder water, to weete ſixteene and fifteene fathome, and cloſe by Steden fourteene, thirteene, and twelve fathome. He that commeth from Witmondt or Iaſmondt towards the Sound, & runneth alongſt four leagues without Meun, runneth alongſt over this foreſayd banck, he that findeth him ſelfe by night upon it, hath a good marke for to make his reckoning thereafter.

Betwixt Bronthollom & the coaſt of Pomerland, in the fareway, when you can ſee Bronthollom, it is 26 fathom deep, but ſo farre to the ſouthwards that you can ſee the coaſt of Pomerland, there it is 7 and 8 fathom deepe, but without ſight of the land 12 and 13 fathom deepe. Alongſt all the coaſt of Pomerland betwixt the New-deepe and Roſehead, it is alongſt by the coaſt 22 and 20, and alſo well 25, fathom deep.

Betwixt Colsbergen and Garſhead it is all flat even ſtrand and ground, without any banckes. In the fareway betwixt Brunthollom and Reefcoll, it is 27, and 28, fathome deepe, but farre to the northwards of it, it is at leaſt 35 & 38 fathom deep,

Northweſt from Reefcoll four or 5 leagues from the land, lyeth a banck of 9, 10, and 11, fathom, when you come from Brunthollom, and Reefcoll commeth to bee ſoutheaſt and by eaſt from you, then you come againſt this banck, and endeth when Reefcoll is ſouth and by eaſt from you.

From this foreſayd banck towards Brunthollom, it is 25, 30 and 36 fathom deepe, ſoft clay ground, but towards Reefcoll it is ſhoulder.

If you caſt the lead often, ſayling alongſt that coaſt you ſhall finde more banckes.

You may boldly ſayle alongſt this coaſts by night, or darke weather in 8, 10 or 12 fathom of from Reefcoll untill about the Roſehead. Thwart of the Roſe-head it is farre flat, and ground as riffe ground. Where you come paſt or about Roſehead it is very deep.

When the Roſe-head is ſouthſouthweſt from you about a league, there it is 30 fathom deepe, but very uneven and full of bancks, and the ground white groſſe ſand.

Roſe-head being ſoutheaſt from you, it is 28 fathome deepe, with red ſtony ground, almoſt like as of it were riffe ſand.

Roſe-head being weſt from you, there it is 16 fathom deep, and white ſaud-ground.

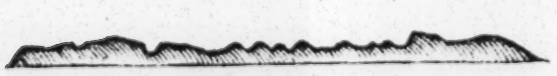
Courſes and Diſtances.

From the point of Sandthamer to Somerhaven, the courſe is north and by east — 1 league
From Somerhaven to Ahuys north — 5 leagues
From Ahuys to Hanno eaſtnortheaſt — 2 leagues
From Hanno to the Rocks, the courſe is eaſt and by ſouth, — 11 or 12 leagues
From the Rocks to the Outlyers north and by eaſt — 1 league
From the Outlyers to Chriſtianopell northnortheaſt — 7 leagues
From the Rockes to Calmer northnortheaſt — 15 or 16 leagues
From the Rocks to Southerorden, the ſouthend of Oeland eaſt — 8 leagues
From Santhamer to the Rocks eaſt n. e. ſomewhat eaſterly — 17 or 18 leagues
From the north point of Brontholm to Ahuys north and by weſt, ſomwhat northerly — 10 leagues
From the n. point off Brontholm to Hanno n. ſomewhat weſterly — 12 leagues
From the north point of Bronthollom to the Rocks n. e. and by n. — 16 leagues
From the northpointe off Bronthollom to Southerorden N. E. a little eaſterly. — 21 leagues
From the ſouthend or e. end off Bronthollom to the Rocks n. n. e. — 19 leagues
From the eaſt ende of Bronthollom to Southerorden northeaſt, ſomewhat northerly — 24 leagues
From Southerorden to Reefcol ſouth and by eaſt — 24 leagues
From Southerorden to Roſehead ſoutheaſt — 33 leagues
From Southerorden to Quinsbrough-Deepe ſoutheaſt and by eaſt, and ſouthſoutheaſt — 48 leagues
From Southerorden to Dermemell eaſt and by ſouth. and E. S. E. — 48 leagues
From Southerorden to Sevenbergen eaſt and by ſouth — 48 leagues
From Southerorden to Derwinda eaſt and by north — 57 leagues
From Southerorden to the ſouth ende of Gotland E. N. E. — 23 or 24 leagues
From Southerorden to the Great Karell northeaſt — 27 leagues
From Vaſterborne to Elburgh eaſt and by north — 4 leagues
From Elburgh to Wiſtee eaſt — 8 leagues
From Wiſtee to Goesbeer eaſtnortheaſt — 3 leagues
From Goesbeer to Sandthamer northeaſt — 1 league
From Vaſterborne, or from the riffe to Brontholme eaſt — 20 leagues
From Vaſterborne to the northwards of Brontholme eaſt by north — 20 leagues
But to the ſouthwards of Brontholm eaſt, and eaſt and by ſouth — 23 leagues
From Wiſtee to the north point off Brontholm ſoutheaſt and by eaſt — 8 leagues
From Meun to Bronthollom eaſt and eaſt and by north — 21 leagues
From Steden to the north end of Bronthollom e. and e. and by n. — 24 leagues
From Vaſterborne to Whitmond ſoutheaſt — 19 leagues
From Vaſterborne to Dornbosh ſouthſoutheaſt — 13 or 14 leagues
From Meun to Withmout ſoutheaſt and by ſouth — 12 or 13 leagues
From Meun to Dornebosh ſoutheaſt and by ſouth — 9 leagues
From the Ielle to the poynt of Dornbosh north and by weſt — 2 leagues
From Dornbosh to VVhitmont, the courſe is northeaſt — 4 leagues
From VVhitmont to Iaſmont eaſtſoutheaſt — 3 leagues
From Iaſmont to the Peert ſouthſoutheaſt — 3 leagues
From Brontholme northeaſt, ſomewhat eaſterlie — 19 leagues
From VVhitmout to the north end of Bronthollom N. E. and by E. — 14 leagues
To the ſouth ende eaſt and by north and eaſtnortheaſt — 13 leagues
From Iaſmondt to the ſouth ende of Brontholm N. E. and by eaſt — 13 leagues
From the Peert to the ſouth end of Brontholm northnortheaſt — 14 leagues
From Iaſmondt to Camyn eaſtſoutheaſt ſomwhat ſoutherly — 19 leagues
From the New-deepe to Colbergen, the courſe is E. and by N. — 16 or 17 leagues
From Comyn to Colbergen eaſtnortheaſt — 4 leagues
From Colbergen to Caſlyn northeaſt and by eaſt — 4 leagues
From Caſlyn to Ruwolde northeaſt and by eaſt — 5 leagues
From Ruwolde to Garshead northeaſt and by eaſt — 4 leagues
From Garshead to Reefcoll E. N. E. — 4 leagues
From Reefcoll to Lyba eaſt and by north — 7 leagues
From Lyba to Serhevis eaſt. — 5 leagues
From Serhevis to the Roſe-head, the courſe is eaſt — 4 leagues
From Colsbergen to Garshead eaſtnortheaſt — 13 leagues
From Reefcoll to Roſe-head, the courſe is eaſt — 16 leagues
From the ſouth end of Brunthollom to the Swin, ſouth and by w. — 13 leagues
From the ſouth end of Brunthollom to Colbergen S. E. and by S. — 16 leagues
From the ſouthend of Brunthollom to Reefcoll, the courſe is eaſt and by ſouth — 24 leagues
From the ſouth end of Brunthollom to the Earthollons north and by eaſt — 4 great leagues
From the north end of Brunthollom, or from the Earthollons to Roſe-head, the courſe is eaſt, and eaſt and by ſouth — 50 leagues

How moſt off all the chiefeſt poynts and places off the eaſt ſea do lye diſtant from Bronthollom.

From Brunthollom to der Memell eaſt, ſomwhat northerly — 65 or 66 leagues
From Brunthollom to Der Lyba eaſt and by north ſomewhat northerly — 67 or 68 leagues
From Brunthollom to Derwinda eaſtnortheaſt — 80 leagues
From Brunthollom to Houbrough, or the ſouthend of Gotteland northeaſt and by eaſt — 50 leagues
From the north end of Brunthollom to Southerorden, the ſouthend of Oeland northeaſt ſomwhat eaſterly — 25 leagues
From the ſouth end off Brunthollom to Southerorden northeaſt, ſomewhat northerly — 27 leagues
From Brunthollom to the Rocks or out rocks northnortheaſt — 19 leagues
From Brunthollom to Hanno, the courſe is north, — 12 leagues
From the north end of Brunthollom to Sandhamer northnorthweſt — 5 leagues
From the north end of Brunthollom to the poynt off Goesbeer northweſt and by north — 5 leagues
From the north poine of Brunthollom to VVeſtede northweſt — 8 leagues

How theſe Lands doe ſhew themſelves at ſea.



The ſouth end of Oeland ſheweth thus, when it is thwart off from you.



Brontholme ſheweth it ſelfe thus, when you come from the weſt.



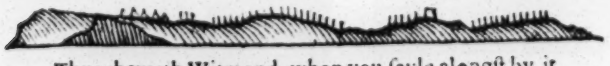
The Eertholmes, being northnortheaſt from you, ſhew themſelves thus.



The Eertholmes being eaſt from you ſhew themſelves thus.



In this forme ariſeth the Eertholmes, being north from you.



Thus ſheweth Witmond, when you ſayle alongſt by it, being three leagues off from it.



Thus ſheweth Iaſmond, when you ſayle alongſt by it, being three leagues from the land.

VVitmondt.

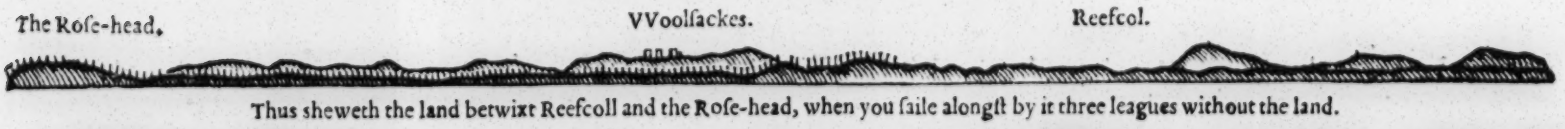
Here under is a great bay, a league long.

Dorneboſch.



Thus ſhewe themſelves VVitmondt and Dorneboſch, wit the land betwixt them both, when it is about ſouthſouthweſt from you, ſo farre that you may but even ſee it from belowe.

The Roſe-head. VVoolſackes. Reefcol.



Thus ſheweth the land betwixt Reefcoll and the Roſe-head, when you ſaile alongſt by it three leagues without the land.



Thus ſheweth the land betwixt Colbergen and the Stolp, when you ſayle alongſt by it about two leagues without the land.

The

The Second Demonſtration,

Where in the Seacoſtes betweene Rygs-head and the Winda are ſet forth.

FRom the Roſe-head to the Heele, the courſe is ſouth-eaſt eigt or nine leagues diſtant. When you come neere the Heele, you are allmoſt ground off in thirtie fathom. On the coaſt of the Heele cloſe by the land, it is 24 and alſo 30 fathom deep.

Roade under the Heele. Under the Heele you may anckor in 12, and 20, fathom cloſe by the land: the ground there goeth off very much. If you be a little off from the land, then you are ground off, north very farre without the land you have no ground in 40 fathom. A league to the northwards off the Heele there runneth off a flat from the land, where of you muſt take heed, when you will go to anckor under the Heele, you may anckor on both ſides of the Heele; but on the inner ſide it is ſoft ground.

From the Heele to Danske before the Wiſſell, the courſe is ſouth and by weſt 5 leagues. If you will anckor before the Wiſſel, then anckor to the weſtwards of the Cheſts, or the Weſter-head in ten or twelve fathom.

Danske Deep. But for to ſayle into the Wiſſell, or the Danske Deep, you muſt loock for the two maſts with barrels upon them, which ſtandeth upon the Cheſts, or the Weſter-head, bring one in the other, and ſayle in right with them, in betwixt the Cheſts, but when you are within Termunde, you muſt choſe the eaſter ſhore, for the Weſt ſhore is flat, when you come before Boatsmans flat, you muſt choſe the ſide off the Greenſhore, and make there faſt with foure hawſers or cables.

Quinsbrough deep. The Quinsbrough deepe lyeth from the Wiſſell, or the Cheſts of Danske eaſtnortheaſt, and northeaſt, and by eaſt 13 leagues. From the Roſe-head eaſt and by ſouth 17 or 18 leagues, and from the Heele eaſt and weſt 13 leagues.

From the Wiſſell to the Quinsbrough-deep and all alongſt to the northwards of it, is altogether a faire white ſandy ſtrand, upon both ſides off the deep ſtand ſome withered trees, to ſee to as if they were burnt, but upon the ſouth ſide ſtand two Capes, or beakons. If you will ſayle in there, bring the capes one in the other, when you come in 10, or 8 fathom, and ſayle in ſo right with them, and ſo you ſhall run right with the buyes, which lye on both ſides of the Deepe to eight or ten in number, to with, on each ſide foure or five, ſayle in betwixt them, untill you come within in the Kettell. There is no certainly to be Written off the lying in off this channel, as alſo of the Danske deep, whereunto men might truſt, for by reaſon of the ſcouring of the Freſhets, and with great ſtreaming of the Ice, they doe change oftentimes, and ſometimes in ſhort but time, the Lords of the land there have very great care to give charge, that they be alwayes well ſeth wit buyes and beakons.

For to anckor in the road without the deep, then anckor ſo that the poynt of Lockſteed lye about north and by eaſt from you, there it is eight, nine and ten fathom deep.

Within the Deep in the Kettell, men do lye to tarrie for the wind in three fatheme and three fathom and a halfe.

For to ſayle up the Haff go out of the ketel about eaſt untill you come againſt the Heert, and ſoutheaſt over it, and then alongſt the Haff amidſt the channell unto the Haverſtrome, the courſe is moſt eaſt. Being over the Heert edge ſomewhat to the ſouth ſhoare for to avoyd that riff which lyeth off from the north ſhoare about a third part into the Haffe, to with, from the poynt by eaſt Fiſhouſes there lyeth a little buye upon it, and come no neerer it then 12 or 13 foot. The right farreway is to the ſouthwardes of it 14 and 15 foote ſoft ground, untill Brandenburgh, from thence further it is by little and little ſhoulder twelve, eleven and ten foot upon the Haverſtraw. When you get the ſteeple of Quinsbrough in ſight, then you ſhall ſee alſo by it a round black litle wood; keep the ſteeple on the north or eaſt ſide off that little wood, untill that you be paſt about Brandenburgh, then let the ſteeple come a ſhips length to the eaſtward of the little wood of trees, and ſayle ſo right with it, till you come by the buyes or little trees of the Hoverſtraw, there you muſt run through amidſt the channell betwixt them, untill you come into the Pregel which lyeth up northeaſt unto the towne.

Melven. From der Pillo to Quinsbrough are about 8 leagues, but to Melven it is about nine leagues, you muſt alſo ſayle up there amidſt the channel about ſouthweſt, but the poynt over againſt the Pillo, where the caſtle Terbaly ſtandeth, you muſt avoid ſomewhat, which runneth far of flat.

Foure or five leagues north and north and by weſt from the Quinsbrough Deep lieth the point of Bruſteroort, and betwixt them both Lockſteed, whereupon ſtandeth a Caſtle with a Church not farre one from the other, and alſo two high hommocks or hills, and the land there abouts is all full of trees.

Der Memell. From Bruſteroort to the Deepe off Der Memell, the courſe is northnortheaſt, 16, or 17 leagues. It is there betwixt them both a faire ſtrand, and the land lyeth in a great bay. The Deep of Der Memell lyeth in northeaſt, and northeaſt and by eaſt, and is two fathom deep, within it you come into a great Haffe: you may runne to the weſtwards about the poynt, and anckor there where you will.

From Der Memell to Heyligena, the coaſt lyeth north and by eaſt, ſomewhat eaſterly foure leagues.

From Heyligena to the poynt of Sevenbergen, north and by eaſt, ſomewhat eaſterly 5 leagues, that is with hommocks and hally land.

Terlyba. Four or five leagues north and by eaſt from Sevenberghen lieth Terlyba. There goeth in the land a little river, but there can go in noſhippes, there is not more then ſix foot water. On the north ſide or the river ſtandeth a Gentlemans houſe or Caſtle, with a turret upon the midſt of it, the north end of the houſe is covered with boards, and the ſouth end with red tyles, to the ſouthwards or the eaſtwards of it ſtand alſo ſome houſes, covered alſo with tyles, in betwixt two woods to ſee to. If you will anckor in the road of Terlyba, then anckor a little to the ſouthwards of the village ſo that the foreſaid Gentle-mans-houſe with the turreth doe ſtand eaſt and by north from you in foure fathom and a half, and five fathome leſſe two foot, there is the beſt road and ground that is thereabouts. When you come out of the ſea, and fall with the land to the eaſtwards or to the northwards of Terlyba, you ſhall ſee within the land a black wood, and the houſes in a ragged valley of Sand-hills.

From Terlyba to Derwinda, the courſe is northnortheaſt 16, or 17 leagues, betwixt them both the land lyeth in a bight, ſo that the coaſt alongſt by the ſhore lyeth no ſo right, eſpecially 4, or 5 leagues by ſouth Derwinda, there it falleth away into a great bight, which men do cal Sackerwyke, and alſo with more ſmaller bights and bayes towards Terlyba.

Sackerwycke. Steenoort. About foure leagues to the northwardes off Terlyba lyeth a poynt called Stickeroort or Steencort, thwart there of it is very flat, ſo that a good wayes from the land, it is not deeper then nine, tenne, and twelve fathome, all ſtony uneven ground, of this poynte you muſt take good heed, and not come too neere it. Anno 1599, in the Spring a man of Hoorn ſayled ſomewhat neere to this ſhould, and come on ground upon an unknowne rock, and loſt his ſhip. To the northwardes of it, towardes Derwinda, thwart off Sackerwyke it is all cleane ground, and farre flat, at many places a good wayes from the land not deeper then ſixe and ſeven fathom cleah ſandy ground, good for to anckor in, when you lye by there with a northeaſt winde, and can get nothing with turning to windwards. But if you keepe under ſaile, you may in turning to windwardes come neare the ſhore every where without feare in foure or five fathom.

For to know Coerland. For to know this Coaſte off Coerland, then remember theſe places here under written.

Bakeovens At Derwinda ſtandeth a Caſtle with three Towers, which is covered above with red tyles, and under it is white, about a league to the ſouthwardes of Derwinda, lyeth the Pakeovens, which is next to Domeſnes, the beſt land to be known of Coerland, it ariſeth firſt when you beginne to ſee the land, in a white Sand-hill, the top whereof is full of trees, but when you come ſee neer the ſhore, that you can ſee the other land alſo, then there ariſeth more land with hommockes, ſo that then it is not ſo good to be known.

About foure leagues to the ſouthwardes of it in Sackerwyke lyeth yet a hommock or hill full of trees with ſome little hommockes to the eaſtwardes of it, when you are thwart of Derwinda, you may even ſee it half wayes up to the top, but not wel from below. This hommocke is called by ſome Duke Dalves Caſtle, and lyeth moſt alone: the land, as well to the ſouthwards as to the northwards of it, is moſt all even and plain land. Duke de Alves Caſtle.

About ſix a leagues to the ſouthwards of the foreſaid hommock, and five or four leagues and an half to the northwards off Terlyba, lye alſo two high hommocks cloſe one by the other, the land to the ſouthwardes of them towardes Terlyba, is to ſee to farre off (when you are thwart of theſe two hommocks, or ſomewhat to the northwards of them) as if it were all broken land, thwart of this about five leagues from the land, or

when

Pascaerte Custen Marines de Courlande et Pruyssen du puis Rygshooft jusques a Derwinde

Danti[illegible]

Pauteker wyck

Pasche Ryckevorst

Melvinghe

Kenningsbergen

Courlsch Kaf

Der Mond

C O

De Zeecusten van Courlant en Pruyssen Tussen Derwinde en Rygshoof Nieuelyx Beschreven by Iacob Aertsz. Colom.

Grande Karel

Kleine Karel

Graburg

Ryfwijck

Ryfhuck

Ryfhuck Baken aen wagt

Hoeft van buijten Baken

Hoeft

Lerwijck

Lerwijck

Lerwijck Capp

Wisby

GOTLAND

Oostergarde

Lieues d'Allemaigne 15 en un degre

Lieues d'Espaigne 17½ en un degre

Lieues Angl. et Franc. 20 en un degre

Les Cost…
Livonie…
Oesel jus…

Estre

Vinas

Esmes

Cuma

Ellandt van

Dagerort

Oesel

Revel

Domesnes

Kyen

Parnouw

Wesenbergh

Brocklom

Kalk

...ostes Marines de
...nie. et Finlant depuis
...jusques à Wyborgh

Duytsche Mylen 15 in een Graedt — Lieues d'Allemaigne 15 en un degre
Spaensche Mylen 17½ in een Graedt — Lieues d'Espaigne 17½ en un degre
Engelsche en Fransche Mylen 20 in een Graedt — Lieues Angl. et Franc 20 en un degre

Pascaerte vande ZEECVSTE van LYFLANT en Oost Vinlandt als mede DAGEROORT en den Rijgsen inham Nieulijcx Beschreven.

Tot Amsterdam bij Jacob Aertsz Colom..

Elsenbos
Borgh
Paltingh
Pulkoort
Gulsboort
Hoge landt
De Sommers
Summegronden
Narva
Wyborgh
Reval
Narva

22

BRIT
MUSEUM

when you can but even ſee the land from below, it is thirty fathom deep.

Banck by Derwinda. When you begin to come about Derwinda within 2 or 3 leagues off the land, there lieth a banck of 12, 13, & 14, fathom: ſome ſay that weſt and by north from Derwinda there ſhould be no more upon that banck then 5, or 6 fathom water, it is about a halfe league broad, betwixt the banck and the land a league without the ſhore, it is againe 20 and 24 fathom deep.

If you will anckor before Derwinda, then bring that foreſaid Caſtle about eaſtſoutheaſt from you, then it cometh almoſt behind the high land, and anckor in five fathom from the ſhore, there is the beſt roade.

Of the Depths and grounds about theſe coaſtes.

Betwixt the Heele and the Roſe-head, but neereſt the Heele, there it is 33 fathom deepe, and the ground is there white ſand.

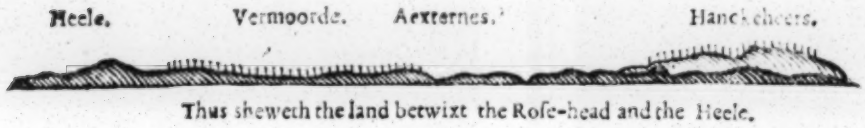
At the Heele in the roade it is 25 fathom deep, the ground black ſand, and going off to 30 and 40 fathom.

Betwixt the Heele and Quinsbrough it is very deepe, comming neere the Heele it is ſteepe, but towards Quinsbrough and the Nerung it goeth up plainly flat.

How theſe lands doe lye one from the other, and from other lands.

From to Roſe-head to Axternes ſoutheaſt — 4 leagues.
From Axternes to Vermorden ſoutheaſt — 1 league
From Vermorden to the Heele ſouthſoutheaſt — 1 league
From the Heele to Danske ſouth and by weſt and ſouthſouthweſt — 5 leagues
From the Cheſts or Wiſſell off Danske too the Deepe off Quinsbrough eaſtnortheaſt — 13 leagues
From the Deep of Quinsbrough to the point of Brufteroort northweſt and by weſt — 4 or 5 leagues
From Brufteroort to the Deep of Der Memell n. eaſt and by n. — 16 or 17 leagues
From the Roſe-head to Quinsbrough deepe ſoutheaſt and by eaſt — 17 leagues
From the Heele to Quinsbrough deepe ſoutheaſt and by eaſt ſomewhat ſoutherly — 13 leagues
From the Roſe-head to Der Memell eaſtnortheaſt, ſomewhat eaſterly — 29 leagues
From the Roſe-head to Sevenbenbergen eaſtnortheaſt — 33 leagues
From the Roſe-head to Derwinda northeaſt — 53 leagues
From the Roſe-head to Dageroort northeaſt and by north — 80 leagues
From the Roſe-head to eaſtergore, north and by eaſt — 45 leagues
From the Roſe-head to Houbrough the ſouth end of Gotland north — 34 leagues
From the Roſe-head to the ſouth end of Oeland northweſt — 33 leagues
From the Roſe-head to Hannoe, the courſe is n.w. and by w. — 38 or 40 leagues
From the Quinsbrough Deep to Houbrough the ſouth end of Gotland northnorthweſt — 45 leagues
From Quinsbrough deepe to Southernorden, the ſouth end of Oeland, northweſt ſomewhat weſterly — 50 leagues
From Der Memell to Houbrough weſtnorthweſt, and weſt and by n. — 37 leagues
From Der Memell to Heylighena north and by eaſt, — 4 leagues
From Heylighena to the poynt off Sevenberghen, north, — 5 leagues
From Sevenberghen to Der Lyba north and by eaſt — 4 or 5 leagues
From Der Lyba to Derwinda northnortheaſt — 16 or 17 leagues
From Der Memell to Brufteroort ſouthſouthweſt — 16 or 17 leagues
From Der Memell to Danske ſouthweſt and ſouthweſt and by weſt — 32 leagues
From Der Memell to the Roſe-head weſtſouthweſt — 29 leagues
From Der Memell to the Earthollom, or the north end of Bronthollom, weſt and weſt and by ſouth. — 64 or 65 leagues
From Der Memell to Houbrough northweſt, ſomewhat weſterly — 32 leagues
From Sevenberghen to the Roſe-head ſouthweſt and by weſt — 53 leagues
From Sevenbergen to Southernorden weſt, ſomwhat northerly — 48 leagues
From Derwinda to the Roſe-head ſouthweſt — 52 leagues
From Derwinda too Bronthollom weſtſouthweſt — 80 leagues
From Derwinda to Houbrough weſt ſomewhat ſoutherly — 37 leagues
From Derwinda to Eaſtergore the courſe is weſt and by north — 29 leagues
From Derwinda to the Godtſche ſand n.w. and n. w. and by n. — 31 or 32 leag.
From Derwinda to Dageroort north — 33 leagues

How theſe Lands doe ſhew themſelves at ſea.



Thus ſheweth the land betwixt the Roſe-head and the Heele.

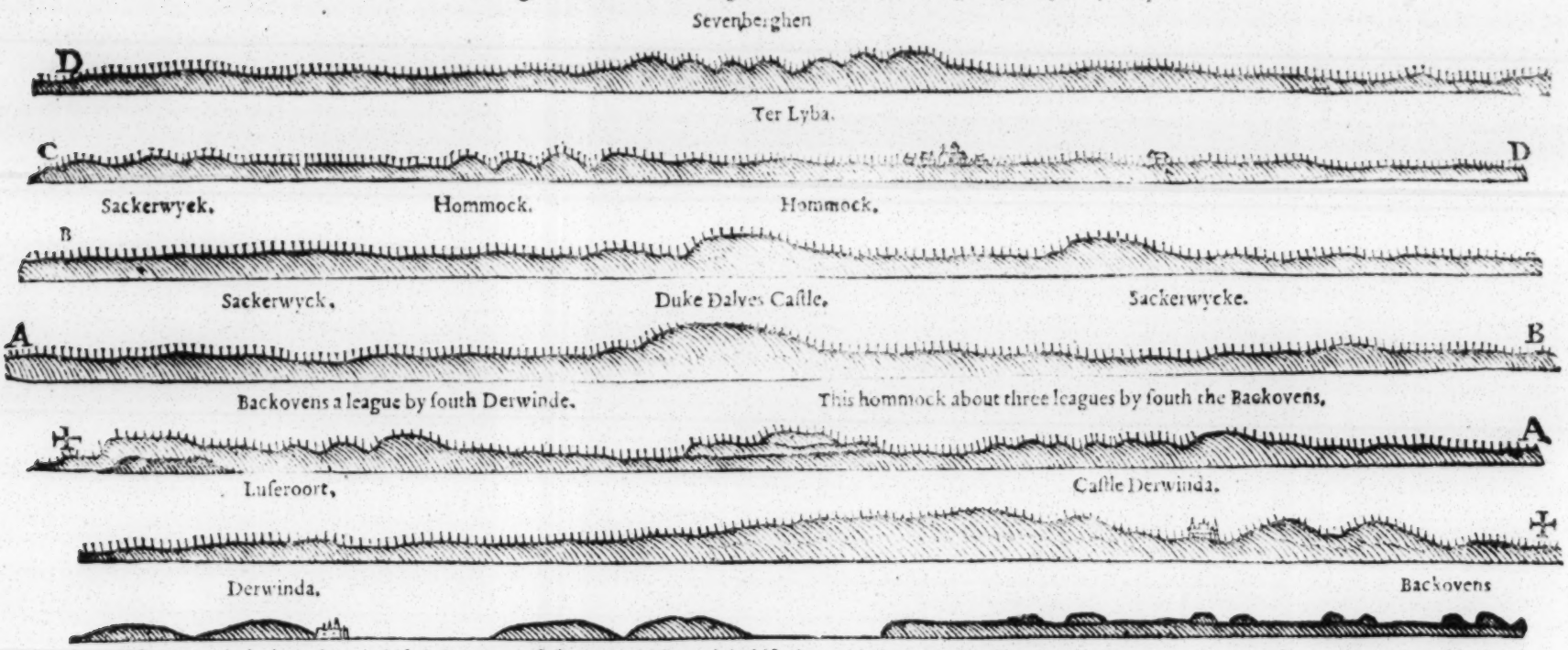


Thus ſheweth the land betwixt Quinsbrough deep and Brufteroort.



Thus ſheweth it ſelfe the coaſt of Coerland about Sevenberghen, when you ſayle alongſt by it a league without the Land.

The coaſt of Coerland from Sevenbergen alongſt by Derwinda unto Luſeroort ſheweth, as is portrayed in these ſix figures following, the like markes belong one to the other, as A A, B B, C C, D D, &c.



When Derwinda doth ſhew it ſelfe firſt, being eaſt from you, it ſheweth it ſelfe thus with the land, as well to the northwards as to the ſouthwards, but when the Caſtle doth begin to come eaſtſoutheaſt from you, then it goeth behinde the land, that you can not ſee it.

The third Demonſtration,

Wherein Are deſcribed the ſea-coaſtes betwixt Der Winda and the utmoſt of the Eaſt-ſea.

THe lying of Derwinda, and how men ſhall know it, is here before declared.

From Derwinda to Lyſerorte, the coaſt lieth northeaſt and by north foure leagues, and from Lyſerorte, to Domeſnes eaſtnortheaſt twelve or thirteen leagues. When you are thwart of Lyſerorte, you can perceive no point, it ſeemeth to be all an even right coaſt from Derwinda to Domeſnes, but comming from Derwinda or Domeſnes, and being a league or two to the eaſtwardes or to the weſtwards of it, you can ſee well that it is a blunt poynt, lying out. Thwart of Lyſerorte runneth off a great uneven ſhoulde, at leaſt two leagues into ſea, but you need not feare of it, you may runne over it in four, 5, or 6 fathom by the lead, like as alſo alongſt al the coaſt of Coerland from Derwinda, until about Domeſnes.

To the weſtwards of Lyſerort the land hath a little bight, there you may anckor for northeaſt, eaſtnortheaſt and eaſt windes: when it bloweth hard, and that you can do no good with turning to windwards, you muſt bring the point of Lyſerorte eaſtnortheaſt from you in ſeven fathom, there is clean ſand ground and good lying.

The land betwixt Domeſnes and Derwinda is verie good to be know. At the poynt of Derwinda it is high, and goet ſloping down by little and little to the eaſtwards unto Lyſeroort: Likewiſe three or four leagues by weſt Domeſnes lieth a high blue hill, called the Doembergh, which is ſteep on the eaſt ſide, and goeth by little and little ſloping downe to the weſtwardes unto neare Lyſerorte, ſo that the two high double blue lands do go down into a valleye one againſt the

Lyſerorte. ther, the low land betwixt both is Lyſerorte. The point of Domeſnes it ſelfs is low ſandie land, lieth out about three leagues to the eaſtwardes of the foreſaid Doemberg: but all that is altogether full of trees.

Riffe off Oeſel Swalverorte. The ſouth end of Oeſel lieth from the point of Domeſnes northweſt and by weſt about foure leagues aſunder, there runneth off a great Riffe, about ſouth and by weſt, and ſouthſouthweſt into ſea, towardes the ſhoulde Lyſerorte, called Swalverorte, that is a dangerous riffe, at leaſt three leagues long, verie hard and uneven, at ſome places towards Oeſell it lieth drye above water, and at ſom other places it is two and an half and 3 fathome deep. To the weſtwards of that riffe lie alſo manie uneven Dwael-grounds a good waies off from the land, which lye alongſt the coaſt of Oeſel to the northwards, which are at ſome places not deeper then two, three and four fathome.

If you will goe to Rye, and comming out of the ſea doe fall with the land about Derwinda, thē leave not the coaſt of Coerland, but runne about by it upon the lead, all along unto Domeſnes in four, five, ſixe or ſeven fathome, according as you have the wind, that you may not fall without, or to the weſtwardes of that riffe Swalverorte. The channell betwixt Coerland and that foreſaide riffe is fourteen, fifteene, and ſixteene fathom, but verie uneven. The ground upon the ſhould thwart of Lyſerorte is at ſome places alſo very uneven for to ſound, ſometimes ſixe, ſometimes eight, and nine fathom, the one caſt at leaſt two or three fathom more or leſſe then the other, and that not very farre from the land but you neede not feare of it, you may bouldly runne to the ſhoare in four and five fathom.

Marks for to ſhunne Swalverorte. But if (when you come out of the ſea) you are paſt Lyſerorte, and come with the land to the northwards of it againſt Oeſell, then you have deeper water, for not far to the weſtwards without Swalverorte it is thirtie fathom deep. If you can ſee Oeſel and Coerland, and that the Doembergh be eaſt ſoutheaſt or ſoutheaſt and eaſt from you, then run on ſoutheaſt until you come neare Coerland, for to avoide Swalverorte, and then alongſt by it upon your lead towardes Domeſnes, as is before ſaide. Or when as you have the Doembergh e. ſ. e. from you, then keepe it ſo ſtanding from you, and ſayle in ſo right with it, and then you ſhall (without hurte) run alongſt over the taile outermoſt ſhoulde of Swalverorte, it ſhouldeth up there verie ſoone and ſodenly from 30 or 15 and 9 fathom, but if you bring the eaſt ſide or the Doembergh not more ſoutherly from you then e. ſ. e. and ſ. e and by e. then you ſhall not meet with any danger of the Dwaelgrounds, not of Swalverorte, you ſhall thus ſaile alongſt at leaſt three leagues over the Dwaelgrounds and Swalverorte, over verie unevē grounds, the one caſt at leaſt 12, the other nine, and alſo wel ſeven, and ſixe fathom, but goe on your courſe without feare, when as the Inner ſide, or eaſt ſide of the ſouth end of Oeſel cometh to be north, and north and by eaſt from you, then you are over the riffe, within al the foule grounds that might hurt you, when as that you gette then 13 or 14 fathome, then ſaile boudly without fear towards Domeſnes.

If it ſhould happen, that with a northweſt winde, you ſhould fal with the land to the northwardes of Derwinda, or Lyſerorte, & ſhould fear to come neere the coaſte of Coerland, then keepe not further off to Sea, then that the eaſt pointe of Doembergh be eaſtſoutheaſt from you, when that you bring the eaſt ſide of the ſouth point of Oeſell n. e. from you, then you ſhal run alongſt over Swalverorte in ſeven fathom. Betwixt Oeſel and Coerland it is ſixteen and ſeventeene fathom deepe. When as Domeſnes is ſoutheaſt and by eaſt, & the ſouth point of Oeſell northweſt and by north from you, and that you are a like neare to them both there it is eighteene fathome deepe.

From the point of Domeſnes runneth off alſo a riffe northeaſt and by north, or a little more northerly a league and a half into the ſea, which is on the eaſt ſide verie ſteepe, but on the weſt ſide ſomewhat flatter.

When you come from out of the weſt, and are bound to Rye you may runne about by it upon your lead, in five, ſixe, ſeven, eight, nine, and tenne fathom, ſo neare as you wil, but according as the winde and weather ſhall be, I know of ſome that have founded about it in foure, and foure fathome and a half: but he that will runne ſo ſomewhat neare about it muſt be verie carefull in uſing of his leade, and not let it reſt.

Not verie farre from the riffe, on the weſt ſide, it is 12 and thirteene fathom deepe. When as the point of Domeſnes, where the whitered trees ſtande upon come to be ſouthſouthweſt from you, then you come on againſt the weſt ſide of the riffe, when that point is ſouthweſt and by ſouth from you, then you are right thwart of the point, but when it is ſouthweſt, and ſouthweſt and by weſt from you, then you are about the riffe, and then you may bouldly goe on ſoutheaſt towardes Rye. Domeſnes and the Deep of Rye lye ſoutheaſt ſomwhat ſoutherly; and northweſt ſomewhat northerly, one and twenty leagues diſtants.

About eight leagues to the eaſtwardes or to the ſouthwards of Domeſnes runneth of another riffe from a point which you may ſound about in five and ſix fathom. The land betwixt Domeſnes and that point lieth about ſouthſoutheaſt, and northnorthweſt, but to the ſouthwards of it, it falleth away to the ſouth; ſo that betwixt this point, and the Deep of Rye, there is a great bay, which is called the Kowerwyck: ſomewhat to the ſouthwardes of this pointe in the bay lieth ſome high land, which lieth from the Deepe of Rye weſt and by ſouth, and eaſt and by north. It muſt be verie cleare whether when you can ſee it, lying at anckor before the deepe of Rye. Kowerwyke.

When as (comming from Rye) you ſhall be ſomewhat to the ſouthwards in the Koperwike, and come running out there by the ſhoare, this foreſayd point hath thus offentimes been miſtaken for Domeſnes, becauſe that then you can ſee no Land without it, but when as you come about the point, you ſhall againe ſee the Land out a head, then you are yet about eight leagues from Domeſnes.

Under the point of Domeſnes you may ankor on both ſides, as well to the weſtwards as to the eaſtwards. If you wil anckor to to the weſtwards of it, then anckor in 6, 7, or 8 fathom, there you have good ſand ground, and ſheltred for e. and ſ. e. windes. If you will anckor to the eaſtward of it, then anckor in 6 or 7 fathom, a little within the point of the land, ſo that the point be n. or n. and by weſt from you, there is good ſandie ground, and good lying for a ſ. ſ. w., w. n. w. and n. n. w. winde: the point of the riffe lieth then from you about northnortheaſt a league & a half. If you will anckor further from the ſhoare, ſo that the pointe of Domeſnes be n. w. or northweſt and by north from you, there it is eighteen and 20 fathom deep and ſoft ground.

If that comming off from Rye againſt the riff of Domeſnes, you will ſail about it, then you muſt runne farre enough about without it, or if you will take it ſomewhat near, you muſt be exceeding carefull in uſing your lead. It is (as hath bene ſaid) verie ſteepe on the eaſt ſide, with a northweſt waye, (which runneth thwart into the riffe) you ſhall have the one caſt twelve, nine, or eight, and the next caſt four, or three fathome, if you fall within the point of the riffe. But if you have been at anckor under Domeſnes, and ſet ſaile from thence, and will ſaile about the riffe, then you may the better runne about it by your lead. Goe from thence n. n. e. and northeaſt and by north, that runneth moſt alongſt by the riffe. When the point of Neſſe commeth about weſt from you, then it will by little and little ſomewhat ſhoulder, you muſt no ſpare your lead, but muſt ſound often. With a n. w. courſe come not nearer it then in 9, 10, or 12 fathom. When the point of Nes cometh to be ſouthweſt from you may ſound about it ſo in five, ſixe or ſeven fathom, then you then come to the eaſt ſide of the riffe, when that is ſouthweſt and by ſouth from you, then you are right thwart of the point of the riffe, but when it is ſ. ſ. w. from you, then you are about the riffe, go then w. ſ. w., or more ſoutherly towards Coerland, and runne alongſt by it, in five, ſixe, or ſeven fathom, (according as the winde ſhall be) toward Luſeroort. Roade under Domeſnes.

If you ſaile from Rye with an eaſt or northeaſt winde, and ſhall ſaile by night about the rif, then ſet your courſe ſo, that you be ſure you run farre enough alongſt to the northwards, or without the Riffe, and keepe that courſe untill that you come neare the grounds of Ambroock or Oeſel in fifteen or ſixteen fathom, then you ſhall be without doubt paſt the riffe, then goe on a while ſouthweſt, untill that you reckon the pointe of Domeſnes to be ſoutheaſt, or ſomewhat more eaſterly from you, then edge up to the coaſte of Coerland by your lead, and runne alongſt by it, in 4, 5, 6 or ſeven fathom, as hath been before ſaid.

Round. Eaſt and by north eight leagues from Domeſnes lieth the Iland Round: you may runne round about it by your lead, in ſixe or ſeven fathom. All alongſt the ſouthweſt ſide it is al foule & ſharp rockie ground, therefore come not nearer to the ſhoare then in ſixe fathome. Southſoutheaſt about a halfe league from the ſouth point lieth a little plate, where upon it is not deeper then ſix foot, there hath once a man beaten off his ruth. It lieth betwixt the ſeven and eight fathome depth, for to avoide that, take thereabouts the ſounding of the ſhoare in five or ſixe fathom, and then you run through betwixt it and the ſhoare, or els, if you keepe in eight or nine fathome, then you runne about without it.

Road under Round. If you will anckor under Round for a ſouthſouthweſt, ſouthweſt, or weſtſouthweſt winde, then runne about the ſoutheaſt point, untill you come to the eaſt ſide, there is a little bay, where ſtand a few howſes with a chappell, which you can ſee when you come ſomewhat neare to the ſhoare, anckor thwart of it in five fathome, ſo that the cappell doe ſtand

ſtand ſouthweſt from you, there is the beſt roade under Round, being clean ſandye ground, but when it bloweth hard the ſea commeth rouling in. At other places it is not verye cleane.

The Deep of the river of Rye.

The farreweye betwixt Round and Domeſnes is two and twentie and three and twentie fathom deepe, and betwixt Round and Duynemondt three and twentie and four and twentie fathom.

From Round to the Deepe off Rye, it is ſouthſoutheaſt, and ſoutheaſt and by ſouth 16 leagues. Before the Deepe of the river Duyn you may anckor in tenne fathome, either to the ſouthwards or the northwardes of it, where you pleaſe.

The Deep of the river of Rye is Pilots water, as well in ſayling up, as ſayling off. How men ſhall ſayle there in or out it is not poſſible to deſcribe, ſo that men mi:t relye upon it for by reaſon of the countinual ſcowring of the ſtream, and eſpecially by ſome extraordinarie great freſhuts, and ſtrong drifts of yce, the depths and ſhoaldes do there often ſhift and change, where of everie one that is bound thiter may be mindfull of.

Lemſael.

From the Deepe of Rye to Parno, the courſe is north and by eaſt one and twentie leagues, betwixt them both, about twelve leagues from Rye lyeth a little towne called Lemſael or Sales, there goeth in a little deepe of eight foot water. Before that Deepe lyeth a banck, which you may ſayle about on both ſides,

Kinne.

and come within it, is three fathom deep. The Iland Kyn lieth from Sales northweſt, five great leagues: from Round eaſtnortheaſt nine leagues, and from the Deepe of Rye north, aboute 14 leagues. It is a little low Iland, about three leagues long, and lieth round about it moſt foule ground. Betwixt Kyn and the coaſt of Lyfland it is four leagues broade, and the right deep betwixt them both is eight and nine fathome deepe.

Ambrook.

Northweſt and by weſt eight leagues from Round, and north ſeven leagues from Domeſnes lyeth Ambrook, that is a little Iland, which is round about foul, with ſharpe ſtone ground, and lyeth a great league diſtant from the coaſte of Oeſell. Betwixt Round and Ambroeck but neareſt Ambroeck lye manie uneven Dwael-grounds, of three, four, and five fathom. Ambroeck and the ſouth ende off Oeſel lye northeaſt, ſomewhat northerly, and ſouthweſt ſomewhat ſoutherly about ſeven leagues diſtant. Under the ſouth poynt off Oeſſell on the eaſt ſide is a good roade for weſterlye windes. If you will anckor there, then anckor in eight or ſeven fathome, ſo that the white Church, which ſtandeth ſomewhat within the ſoutſtermoſt poynt, doe ſtand weſt and by ſouth from you, there is good ſoft claye ground, and you ſhall lye ſheltred for a weſt and weſtſouthweſt winde. The ground is there verie even and flatte, when as you gette the ſeven fathome, and ſayle towards to land, it continueth long al one depth of ſeven fathom, untill you come verie cloſe by the ſhoare before it will be ſhoulder.

Dwael-grounds.

Roade under Oeſel.

It is there all alongſt by the eaſt coaſt of Oeſell flatte ground of three, four, and five fathome.

For to ſayle from the ſouth ende of Oeſell unto Arentsberg through within Ambroocke, you muſt leave two thirds of the water on the larboard ſide towards Oeſell, and one third part on the ſtarboard ſide towards Ambroocke, there you ſhall have about ſeven fathom water, and ſoft clay ground, towards the coaſt of Oeſell it is full of uneven Dwale-grounds; alongſt by the vveſt ſide of Ambrooke you can not lightly take harme.

Arentsbergh.

Arentsbergh lyeth from the ſouth ende of Oeſell northeaſt diſtant tenne leagues, but from the Iland Abrook northweſt four or five leagues. Upon the weſt ſide of Oeſell, the coaſt lyeth off from the ſouth end unto Hondſorte, with divers bay, about northnorthweſt and ſouthſoutheaſt ſixteen leagues, betwixt them both lye 2 lade places, Wyke and Reeck. Alongſt this vveſt coaſt off Oeſell lye verie manie uneven and foul grounds, vvhere of men muſt take verie good heede.

Hondſorte, the northvveſt poynt of Oeſell, and the poynte of Dagerorte lye northnorthvveſt, and ſouthſoutheaſt about 8 leagues diſtant Betvvixt them both is a great have, the runneth alſo a channell through, but it is ſo ſhould, that no ſhips can go through, and all over ſharpe and uneven ground. Upon Dagerorte ſtandeth a high tovvre vvhich the Wor. Counſell of the tovvne of Revell cauſed there to be builded, for to knovve the land by, vvhich men may ſee on both ſides of Dagherorte farre into ſea, and alſo may ſee it over the land farre in the foreſayd baye.

Towre upon Dagerorte.

Under the point on the ſouthſide of Dagerorte is good lying for north and northeaſt vvinds & cleane ſand ground, you may ſound about by the poynt of Dagerorte in ſeven or eight fathome, on the north ſide of the poynte is good roade for ſoutherly windes.

From Dagerorte to Syburghnes, the coaſt lyeth northeaſt ſeven leagues. Betvvixt them both, to vvete, three leagues from Dagerorte, and four leagues from Syburghnes, lyeth a ground, going flat off thwart from the land northweſt into ſea, at leaſt five or ſixe leagues, almoſt in manner as the greate luttiſh riffe, is firſt of three, four, five, ſixe and ſeven fathom deep, and waxeth deeper by little and little towards the Finniſh Scheers, where at laſt it runneth to nothing.

About three leagues without the land of Dagherorte, north and north and by eaſt from the high towre, there lyeth a ſuncken rock which is verie ſteep, whereupon there is no more then tenne foot water: A man of Oſſaenen hath beaten upon it, which wente no deeper then eleven foote and a half, preſently after the ſtroke he caſt the lead, and found five fathom depth. The Towre of Dageroort was then from him ſouth and ſouth and by weſt.

Syburghnes.

Syburghnes is an out poynt, with two poynts, from each of which ſhooteth off a riffe, betwixt theſe two riffes is a faire flat ſand ſtrand, where you may anckor ſo neere the ſhoare as you will, in ſixe, five or four fathome.

A little to the weſtwards of the weſtermoſt poynt of Syburghnes, not farre from the land lyeth a ſhoulde under water, about ſo great as a ſhippe, whereupon it is not deeper then twelve foot.

Oxeholm Grasholm.

From Syburgnes to Oetgeſholm, the courſe is eaſtnortheaſt ſeven leagues, betwixt them both goeth in the Moenſound.

To the ſouthwards of Oetgenſholm goeth in a great bay into the land, wherein lyeth an Iland, and behinde it a little towne called Hap-ſael, there you may anckor where you will. On the ſouthweſt ſide of this baye, runneth of a great ſhoulde or ledge of rocks at leaſt a great league into the ſea, which is verie broade, you may runne in alongſt by it into Moneſound.

From Syburghnes to the Oxeholme and Graſholm, the courſe is ſoutheaſt four or five leagues, the Graſholmes are two little greene Ilands, and the Oxeholme lyeth about a league to the weſtwards off the Graſholm, about which you may ſaile, and anckor round about, a little league north and north and by eaſt from the Oxholm lyeth a ground looſe from the land, which you muſt avoyde, called the weſter Graſground, there are two ſhoulds, which are called the Graſgrounds, the other Graſground, which is called the eaſtermoſt, lyeth over againſt the Graſholm, towardes the riffe of Haſpael, upon which there is no more then five foot water. He that will ſayle into the Moenſound, muſt take heed thereof.

Gras-grounds.

He that will ſayle off from Oetgenſholme through the Moenſound muſt goe on ſouthſouthweſt to the Graſholme, and ſayl in cloſe by it, for to avoyde the Graſground, which lyeth to the eaſtwardes over againſt it. From the Graſholme to the poynt off the Oeſell, where the great tree ſtandeth upon, the courſe is ſouthſoutheaſt ſeven leagues. From the Graſholm towardes Oeſell lye four little Ilands, each aboute a league one from the other.

Mouns ſound.

When as you ſayle from Graſholme towardes Oeſel, you muſt ſayl alongſt by theſe little Ilands, leaving them lying aboute two or three cables lengths on the ſtarboard ſide, untill that you come to the land of Oeſel over againſt the great tree. In this fareweye it is five fathome deepe.

The Caſtle of Moons ſound.

When as you come ſayling ſo alongſt paſt the Graſground, you ſhall meete with an Iland on the larboarde ſide, to the northwards of it goeth in the Deepe unto the Caſtle of Moenſound in three fathome, but ſometimes, it is ſhoulder, for there it is all full of ſands. To the ſouthwards of the ſame Iland goeth in another Deep which you may ſayle through untill you come to the ende of Oeſell, and then you leave the two little Ilands by the ſouth ende of Oeſell, lying on the ſtarboard ſide. But the right and beſt Deep, goeth from the aforeſayd great tree, in alongſt by the land Oeſell, which is three and four fathome deepe, and at laſt it will be ſixe, ſeven and eight fathom: when you ſayle alongſt there, you leave the foreſayd two little Ilands by the ſouth ende of Oeſell lying on the larboarde ſide. From the greate tree to the firſt little Iland, the courſe is eaſtſoutheaſt five leagues, and then from the firſt little Iland to the ſecond ſoutheaſt, & forth to the ende of Oeſell eaſt and by ſouth.

Paternoſter.

From that ende or northeaſt poynte off Oeſſell runneth off a foul riffe, a great half league into the ſea, called the Paternoſter which you muſt avoyde.

From this northeaſt poynte off Oeſell unto Parno, the coaſt of Lyfland lyeth eaſtſoutheaſt and weſtnorthweſt.

When you come about that poynte, you may ſaile into the ſea or baye off Rye, where you will, weſt and by north to Arentſbergh, ſouthweſt or ſomewhat weſterly to Ambrooke, ſouthſoutheaſt to Round, ſoutheaſt and by eaſt to Kinne, or where you will, the lying of Kinne is deſcribed here before.

Magno Serckholm.

From Kinne to Magno and Serckholm all alongſt unto Parno, the courſe is northeaſt eight leagues. Thwart of Magno and Serckhollom it is betwixt Coerland and the Ilands, five &

ſixe fathom deep, & alongſt Coerland altogether a faire ſtrand.

Parno. Parno lieth in a great Baye, it it is there in the roade 3 and 4 fathom deep. For to anckor there you muſt anckor ſo that the ſteeple of Parno ſtand N. N. eaſt from you there is beſt roade.

Oetgens-holm. Oetgenſholme and Syburghnes lye eaſt and by north, and weſt and by ſouth ſeven leagues diſtant one from the other.

You may ſaile round aboute Oetgenſholme, and alſo anckor under it, for northerly and northweſt winds in 6 or 7 fathom.

Great Roge. From Oetgenſholme to great Roge, the courſe is eaſt and by north four leagues, betwixt them both, a little to the ſouthwardes of the farewaye lieth a ſhoulde even above water, which you may ſaile round about, but you may not come verie neare it becauſe it is ſtonie and rockie round about it. Great Roge is an out point with two or three white Chalck-hilles, and thereby is verie good to be knowne. Betwixte this point and Oetgenſholm, ſomewhat more ſoutherly lieth another point, called

Little Roge. little Roge, betwixt it and great Roge, goeth a broade Sounde into the land of ſixe and ſeven fathom depth; but in the ende it is ſhoulde. Thereaboutes it is call cleane ground, and good for to anckor in.

From great Roge to the Iland Narghen, the courſe is eaſt five leagues.

When you ſail from great Roge towards Narghen, you ſhall finde four leagues to the eaſtwards of great Roge an other point with two white chalck ſpots, called Surp, betwixt it and great Roge, the land falleth awaye to the ſouthwards, into a great baye. If you will ſaile to Revell, then ſail alongſt by that point of Surp, towards Nargen, leaving it on the larboard ſide off you, going on ſtil eaſt, until you com to the eaſt end of Nar-

Riffe off the Karels. gen. Being there by it, then goe on eaſt ſoutheaſt a league and an half, and then you ſhall come by the end of the riffe, which lieth off from the Blote Karels, come no nearer it then in ſixe

Revel. fathome. When as the caſtle of Revell commeth without the Karels, then ſail right unto the head of Revel, untill you come to the eaſt ſide, let your anckor fall there, and then hall with the fore-ſhips or ſtearne, to the head, and make you faſt by 4 cables, for the north and northnorthweſt windes which blow there flat open in making it a lee ſhore, ſo that ſometimes with ſuch winds there commeth in a rowling ſea.

Eaſt about, foure leagues from the ſouth ende of Nargen, lieth the Iland the Wolfe, which is aboute a league long.

Northnorthweſt, and northweſt and by north two leagues from the weſtend of the Iland the Wolf, and northeaſt and northeaſt and by eaſt from the north end of Nargen lieth a rock under water called the Revel-ſtone, although there be no more water upon the three or 4 foot, yet it is in the Summer time with faire wether, oftentimes ſo ſmooth water, that it doth not break upon it, and it is alſo very ſteep, ſo that you may not come neerer it by your lead then in 12 fathom. The markes

Revell-ſtone. for to knowe the place of this Revel-ſtone are theſe: When the northeaſt end of Nargen is ſouthweſt and ſouthweſt and by weſt from you, and the high ſteeple of Revell is capſtone barts length, or a little more to the weſtwards off the weſt end of the Iland the Wolfe, then you are right thwart of this rock. The ſteeple of Revell is alſo then right ſouth from you. But when

The wolf. the ſteeple of Revell cometh to the Wolfe, and that you are bound the eaſtwards, and you are ſurely paſt this Revell-ſtone, and a good wayes to the eaſtward of it.

From the weſt end of the Ilands the Wolfe lieth off a riff to the northwards in the ſea, about an Engliſh mile toward the Revell-ſtone, upon the end of this riff lye five or ſixe rocks a little above water. If you come away from Revell on north and by weſt alongſt by the Wolf, the marke the point of Surp, whee that commeth even unto the ſouth end of the Iland Nargen, then you ſhall alſo have even the length of the foreſaide riffe. If you looke out then on the ſtarboard ſide, and be not ſailed very farre alongſt to the weſtwardes of the Wolf, you ſhall the foreſaid rockes (lying upon the end of the riffe) lye thwart from you, and then you may run to the northwards about by them in five fathom without doing amiſſe.

Betwixt Nargen and the Wolf lieth alſo a ſtony ſhould which

Showld of Nargen. is very broad, but much neerer Nargen then the Wolf, and lieth from the ſouth points or Narghen about northeaſt, and from the north point eaſtſoutheaſt. Therefore if you bring the ſouth pointe of Nargen about ſouthweſt or ſouthweſt and by ſouth, and the foreſaid north point weſtnorthweſt from you, and that the Wolf lye then free from the mayne land, you ſhall not miſſe to fall upon this ſhould.

Nargen. You may ſaile round about Nargen, and alſo anckor under it for northerly and weſterly winds in ten, twelve, fourteen, and eighteen fathom.

From Nargen to the Iland Wranger, the courſe is eaſt, ſeven leagues. The lying there of you may ſee in the following.

Of the coaſt of Finland betwixt the Alands Haffe and Elſenvos.

BEtwixt Uxe or Boſtel on the coaſt of Sweden, & the Ilands of Aland, goeth in the Alandts Haff, which men do call the Alandts. North Bodem, which lieth up ſo farre to the northwards into Finland, that a ſhip with good freſh way ſhould ſcarce be able to ſayle to the end off it in five dayes: upon the fartheſt end of this North Bodem lieth the towne Toreu, there Sweden is parted from Finland.

At the outermoſt rocks off Finland on the Alandts Haff lye three Ilands, Ercke, Kaſtelholm & Corpe. Ercke is the weſtermoſt of all, and the outermoſt, from thence goeth in the Corpe Ercke. found, northeaſt alongſt thwart off Caſtelholm and Corpe. Corps. Corpe lieth within the other Iland, and from Corpe you may edge over into the Liet of Al bo, which commeth running off from Uttoy: you may alſo ſaile up into this channell about behind Lipland, and ſo come out into the North Bodem.

Uttoy is a great Iland, upon it ſtandeth a great maſt with a barrel for a beakon, & lieth from the Iland Corpe eaſt and weſt Uttoy. about nine leagues. On the weſt ſide of Uttoy goeth up the Liet of Abbo, which lieth in firſt north and north and by eaſt, about three or foure leagues, and then you come on againſt a great Iland. And then it lieth in alongſt that greate Iland northeaſt unto the Sound of Al bo. Abbo lieth at the end of that foreſaid great Iland. This Liet runneth up alongſt to the eaſtwards through betwixte the rocks about thirteene leagues, within it Abbo. lieth a rock under water which is a Magnes or Load-ſtone, alſo Magnes. the ground ſeemeth to be there of the vertue of the Lodeſtone, for when you come thereabouts, the compaſſes doe not ſtand, but run and turne without any certain ſtanding ſtill, until that you be at leaſt a league paſt it, and then they begin to ſtand right againe. From thence it lieth eaſt and e. and by ſ. al alongſt throng the rocks unto the Rough Iland, to the weſtwardes of it runneth the channel of Luys into the ſea, when you are thwart Luys. of it ſea, you may ſee the land of Revell. It is there betwixte them both, to with, betwixte the Out-rockes and Nargen, or the land thereabouts ten leagues broad.

The Out-rocks of Luys, and the channell of Uttoy lye eaſt & weſt about 21 leagues diſtant, althought it be there betwixt them both all broken land, and full of rocks, yet nevertheles there are no havens nor channels fit for ſhips to come into.

From Luys alongſt without the Rocks the channell of Elſenvos, the courſe is eaſt and by north fifteen or ſixteen leagues but Nargen or the Wolf, & the channell of Elſenvos lye north northeaſt and ſouthſouthweſt about 16 or 17 leagues aſunder.

The Coaſt of Lyflandt.

VVranger. The Iland Wranger lieth from Nargen eaſt diſtant ſeven or eight leagues, & three leagues eaſt and by ſouth from the Wolf.

Under Wranger is on both ſides good road and good anckor-ground, eſpecially on the ſouth ſide, where there is a Bay, there you may anckor betwixt the two points in ten, twelve or fourteen fathom, according as ſhall be convenient, and lye theltred for a northeaſt and eaſt, and alſo for a northweſt and weſt winde. You may ſaile round about Wranger, but from ſom points (as from the ſouth pointes, and from the north point) lye off ſome little riffes, whereof you muſt take heed, and be carefull in uſing the lead when you ſaile about by them.

About an Engliſh mile from Wranger lieth little Wranger, a little long ſmall Iland, lying about northweſt and ſoutheaſt, Little Wranger. which is rocky and foul, eſpecially on the N. E. ſide From the ſ. e. point runneth of alſo roky riff, wherof you muſt take heed.

On the ſouthweſt ſide is good anckoring for northeaſt & eaſt windes, anckor under it, ſo that the ſoutheaſt point lye about eaſt from you, there is good lying for northeaſt and eaſt windes.

From the northweſt point runneth off alſo a little riffe which you may ſound about in foure, five or ſix fathom, according as your ſhip goeth deepe, when as you will goe to anckor there, comming from the northwards, or about to the northwards of the Iland.

About a great league north from the eaſt ende of Wranger, and two little leagues north and by weſt from little Wranger lieth a little Iland, which by ſome is called Kuyken, but commonly is called the Koecxſchaer, which is a litle bare rock with Kocx-ſchaer. a Warder upon it, you may ſaile round about it on both ſides, it lieth from the Wolf northeaſt and by eaſt diſtant 2 great leagu.

From Wranger to Eckholme, the courſe is eaſtſoutheaſt thirteen leagues.

Three leagues by weſt the Eckholms lieth an out-poynt, to the eaſtwards of it a Bay, called the Monkwyke, there it is Monkwyk good Ankoring for ſouthweſt and weſt winds in eight, ten, or twelve fathom. Betwixt this point of the Monkwyke and Wran-

Wranger lye three little long Ilands, lying alongſt the coaſt of Lyfland, about a halfe league from the ſhoare, which are very foule and rocky, and almoſt nothing but rockes, whereof you muſt take heed, otherwiſe the coaſt betwixt them both is clean.

Eckholm. The Iland Eckholm is clean round about, and lyeth about northweſt and ſoutheaſt, it ſheweth it ſelf high at both ends, & in the middeſt with a valley. Under Eckholme is good anckoring at the northeaſt ſide for weſt & ſouthweſt winds in 20, 22, and 25 fathom, and on the ſoutheaſt ſide for eaſterly winds.

Telsburg. Five leagues to the eaſtwards off Eckholme lyeth the Caſtle Telsburgh, thwart of it lyeth off a ſhowld from the ſhoare, but you may ſound it in 8 or 9 fathom. From thence the coaſt lyeth alongſt moſt eaſt and by ſouth unto the road of the Narve about 16 leagues, it is altogether cleane without fowle ground, ſo that you may alſo ſayl alongſt there by night in 8 or 9 fathom without feare.

Northwards from this coaſt in the fareway betwixt Eckholm and the Iland of High-land lye the Chalck-grounds, Hoſts, the litle and great Tutters, al of them with very dangerous foule grounds and ſhowlds. Eckholm and High-land lye E.N.E. and W.S.W. diſtant about 11, or 12 leagues. About 2 or 3 leagues eaſt and by north, or eaſtnortheaſt from Eckholm, and alſo two leagues from the main land lye the Chalck-grounds, which are foul grounds, almoſt 3 leagues long under water, & ly to the w.wards w.n.w. into the ſea, and to the eaſtwards almoſt to the riffs of the Hoftes. Some ſay that they are faſt to it, ſo that you ſhould not be able to ſail through betwixt them.

Chalck grounds.

The Hoftes lyeth S.S.W. from High-land about 5 or 6 leagues, which is a long ſmall Iland foule round about, with two foule riffes that lye out, the one lieth off ſomewhat to the eaſtwards, & the other to the w.wards unto the Chalck-grounds. Hoftes.

Northwards from the Hoftes ly the little Tutters, & 2 leagues to the eaſtwards of the litle Tutters ly the great Tutters. Little Tutters.

The little Tutters are two Ilands not high, but round about rocky, riffy, and fowle, they lie ſouthweſt and ſouth about three leagues from Highland.

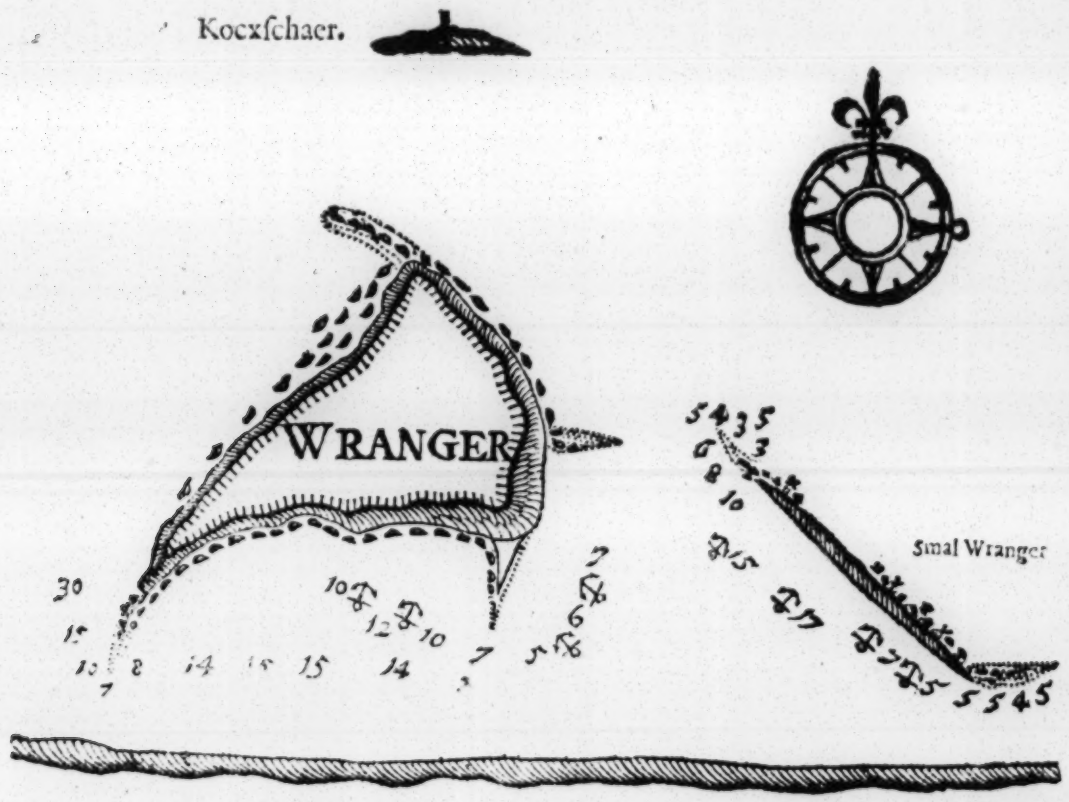
The great Tutters lye from the litle Tutters eaſt about two leagues, and from Highland ſouth and by eaſt alſo two leagues, there lyeth off from it alſo a great ſtony riffe weſtwards toward: the little Tutters: there lieth alſo betwixt the little and great Tutters a row of rockes, whereof you muſt take heed when you will ſaile through betwixt them. Great Tutters.

Southeaſt and by ſouth about two leagues from the great Tutters lieth a ſhould of 5 fathom. He that will ſayle to the ſouthwards of theſe foreſaid Ilands and ſhoulds towardes the Narve, may be mindfull thereof, it lieth about 4 leagues to the eaſtwards of Telsburgh: two or three leagues from the ſhore.

Betwixt the great Tutters and Highland lyeth a ſhould upon which there is no more then ſix foot water. Showld.

S.E. a great halfe league from the ſouth end off Highland lyeth another ſhould of a fathom & a halfe and 2 fathom deep.

Great and ſmal Wranger.



To the northwards off all theſe foreſaid rocky Iland and fowle ſhoulds, lieth a litle Iland whereupon ſtandeth a Maſt for to know it by, and to diſcerne it from the other litle fowle Ilands, that you may come indifferent near to, but not to neare, for it is alſo ſomewhat rocky and fowle, but not farre of, it lieth from the litle Tutters weſt and by north about two leagues, from the Iland Highland ſouthweſt and by weſt at leaſt foure leagues, but from Wranger or the Kockſchaer e. & by n. 20 leagues.

He that will ſayle off from Wranger towards the Narve alongſt to the northwardes of theſe foreſayd grounds, and doe get ſight of this little Iland with the maſt, may thereby the better know to direct his courſe, but it is not wiſdome to ſayl throug theſe foreſayd ſhowlds, except for them that are very well acquainted.

Highland or Hogland. The Iland Highland or Hogland, is about three leagues long, & not a league broad, lying S. S. E. & N.N.W. When you come out of the weſt, it ariſeth in three hommocks, ſo high to looke to as Coll in the Sea wreach upon the north end and upon the eaſt ſide it doth ſtand al ful of trees. A little about the north poynt on the eaſt ſide is a litle bay thwart of a Boers houſe, there it is clean ground and good lying for weſterly and ſouthweſt winds, ſomewhat to the ſouthwards of it, not very far from the ſhore, lyeth a great rock above water. At the north end is alſo good lying for a S. E. wind. Alongſt the ſ.w. ſide you may alſo anckor every where in 16, 17, or 18 fathom, cloſe by the land for E. & n. e winds.

From the ſouthweſt ſide of Highland unto the road of the Narve, the courſe is ſoutheaſt about 16 leagues, and then you run through betwixt the Highland and the Tutters.

Likewiſe when as you ſaile on northweſt from the roade of the Narve, then you run alongſt betwixt the Tutters & Highland, but you muſt be very carefull, and take heed off the foreſayd ſhowlds, which ly betwixt them both.

The land of the Narve men do know by 3 high hills, lying a league to the weſtwards, or to the ſouthwards of the road, and a league further to the weſtwards ſtand ſome little houſes upon the high land.

The Narve. The towne off the Narve lyeth upon a river about two leagues within the land. For to ſayle in there men were wont to look out for a long hill, which lyeth on the ſouth ſide within the rivers mouth, and at the eaſt end goeth downe ſomewhat ſteep, with ſome high trees to the eaſtwards of it, then they brought the woodden tower of the Narve to the northwards of the foreſayd trees, and did run in ſo with it. When as the eaſtermoſt of the three foreſaid hils (a league to the weſtwards of the rivers mouth) come over a litle hommocke, which lyeth on the water ſide, then they where upon the barre of the rivers mouth, there was upon the ſhowldeſt ten foot water, and then they ſailed up the river, that was wont (for ſome years) to be ſo, but it is poſſible ſince that time more or leſſe altered, like as it doth oftentimes happen in ſuch rivers.

Ruſſe-haecks. From the road of the Narve to the Ruſſe-haecks, the courſe is N. N. W. five leagues, which lye with many rockes a good wayes off from the ſhore. The poynt thwart of it is called the poynt of Caſtrum after a little town (ſo called) lying there.

Rette Sarre. From the Ruſſe-haecks northnorthweſt 5 league lieth a litle Iland, called Rette Sarre, from which there runneth off a rif S. into ſea. From this Iland, or a league to the weſtwards of it unto the Summers, the courſe is ſouth and N. 4 or 5 leagues.

Slimme-grounds. Eaſtſoutheaſt from Highland, and 3 leagues from the Ruſſe haecks lyeth another ſhowld, called the Slimme-grounds, it lyeth long and ſmall alongſt northnorthweſt and ſouthſouthеaſt, with hard wind you may ſee it break in 4 or 5 places: when it is weſt from you about halfe a league, there it is two fathom deep to three, foure, five and ſix fathom uneven ground, ſome of the rocks of it lye alſo above water.

From the Ruſſe-haecks to the Rode-hell, the courſe is northeaſt about foure and twenty leagues, betwixt them both on the Ruſſe ſide, runne alſo divers rivers into the land, but there it no trade. The land there lyeth in a great bight, it lyeth firſt from the Ruſſe-haecks unto the River of Nioa, or Oreſchacke eaſtnortheaſt about thirteen leagues, the parteth Ruſland from Finland by a great Meer or water called the Lading. The Lading.

The ſtrong caſtle of Noetenburg lieth there alſo upon a ri-

ver which lieth out of the Lyflands or eaſt ſea into the foreſaide Lading. Further the lande lieth northnortheaſt and north and by weſt about thirteene leagues unto the Rode-hell.

For to ſayle from Revell to Wyburgh.

FFrom a little to the northwardes of the Kocxſchaer to Higland, the courſe is eaſt and by north a little more eaſterly 23 leagues, with that courſe you runne alongſt a little to the northwards of it. You may ſaile about Highland on both ſides, but alongſt to the northwardes of it is the right fare-way for theſe that are bound to Wybrough. A halfe league north and by weſt from Highland lieth a ſuncken rock under water. For to avoyd it you muſt ſaile cloſe alongſt by Highland. Further the lying of Highland hath been deſcribed here before.

Summers. From Highland to the Summers, the courſe is eaſt and by north ſeven leagues. Summers is a rock or little Iland allmoſt like the Eartholms, it ſheweth it ſelfe in three hommocks. A little to the eaſtwards of it lye ſome rocks above water: you may ſaile about on both ſides of Summers, and alſo through betwixt Summers & the foreſaide rocks that lye to the eaſtwards of it: but about to the northwards of it is the right fareway, you can not alſo runne alongſt farre to the northwards of it, for a halfe league to the northwards of it, it is very fowle and full of little rocks, ſome above and ſome under water.

Goeſchaer or greate Fiſher. From the Summers to the Goeſchaer, the courſe is eaſtnortheaſt ſeven leagues. The Goeſchaer which by ſome is called the great Fiſher is a long and broken Iland of ſeven rocks, therefore it is alſo called the Seven-rocks, it lieth not far from the land, ſo that you can not get ſight of it, before that you come nearer it, it ſheweth it ſelfe when you ſhall firſt ſee it, in 4 hommocks, as if it were four little low Ilands, you muſt leave it lying a halfe league on the larboard ſide, for to avoid a ſuncken rock which lyeth off from it ſouthſoutheaſt a great ſhot of a caſt peece. When the water is not very ſmooth, but a little grown, you may perceive it by the breaking of the water: you may alſo well ſaile to the northwardes of this ſuncken rock, to wit, through betwixt the ſuncken rock & the Goeſchaer, then you muſt run indifferent cloſe alongſt by Goeſchaer; when it is northweſt and by north from you, then you are paſt the foreſaide ſuncken rock, whether that you run alongſt to the northwardes or to the ſouthwardes of it.

Little Fiſher. From the Goeſchaer or great Fiſher to the little Fiſher, the courſe is northeaſt and by eaſt three leagues. The little Fiſher is a bare round rock which lieth not farre from the land: when you come neere it, you may know it wel from the other rocks, becauſe there lye none farre from the land alone, you may ſaile about it on both ſides, but alongſt to the ſouthwards of it is the right fareway. About a ſhot off a caſt peece ſoutheaſt, or ſoutheaſt and by eaſt from this little Fiſher, lieth a black rock with the top even above water, almoſt like a buye upon the Flyeſtreame, to ſee to a farre off as if it where a Seales head. This rock you muſt leave on the ſtarboard ſide, and run through betwixt it and the Fiſher.

Hee that muſt turne to windwards hereabouts, let him not come very neer this rock, for men doe hold that there lie more rockes by it under water.

Both the Fiſhers are otherwiſe clean round about; ſo that you may alſo finde road under them.

Corſnes. From the little Fiſher to the point Corſnes, which the Lubickers doe call Kruyſoort, the courſe is eaſtnortheaſt ſomewhat eaſterly a league. Corſnes is a point going off low of the maine land, not very clean, which you muſt leave on the larboard ſide, To the weſtwards of Corſnes lye two little Ilands cloſe to the land. Thwart of the point lieth a rock allmoſt like a little boat, you may runne about by it in foure fathom and a halfe, but nearer. On the eaſt ſide of that point you may anckor for Weſterly winds in five or ſixe fathom.

About two leagues thwart off from Corſnes, lye very many rocks, ſome one fathom, ſome a halfe fathom, ſome more, and ſome leſſe under water, you may not goe out of the fareway without great feare and danger. It is impoſſible to deſcribe all the uneven grounds, the great multitude of rocks and rocky ſhoulds which are lying thereabouts.

Rode-hell. From Corſnes to the Iland Rodehell, the courſe is northeaſt and by north about three leagues. Rodehell is a greate rough Iland with a ſaddle in the middeſt, which you muſt leave lying on the ſtarboard ſide. The north point is a red point, there ſtand up long ſtaves over end, like unto a Warder in Norway, you muſt goe cloſe alongſt by them, or you may run in amidſt the channell, according as ſhal be beſt convenient, but you may not goe cloſe by the north point over againſt it (which the Dutch ſhippers doe call Jan Lambertſons point) becauſe of a ſtony and ſteepe little riff which lieth of from it, but you may runne about by it upon your lead in ſeven or eight fathom, but may come nearer) the right fareway betwixt them both is fourteen and fifteen fathom deepe.

Betwixt the point of Corſnes and the Rode-hell, it is not without danger to turn to windwards, eſpecially you muſt be very carefull not to run to far over to the ſouthwards, but to the northwards, towardes the maine land, it is indifferent cleane: It is there in the fareway fifteen fathome deepe, ſoft clay ground.

For not to miſſe this foreſaid channell; or to the north point of the Rode-hell, then take marck out a ſtearne of the little Fiſher, bring that even without the point of Corſnes, and keep it ſo ſtanding ſailing towards the Rode-hell, and ſo you ſhall not ſaile to fall right before the channell. This is a ſure marck whereupon you may truſt. If you fall ſomewhat to the ſouthwards of the foreſaid channell, you can ſee opening, but ſeemeth to be all whole to the maine land, ſo that men (that are not well acquainted) might not know were to ſeek the channel, but ſailing to the northwards, the channell doth open it ſelf.

When as you ſhal be then within the foreſaid point of Rodehell, you may anckor there where you pleaſe, and fetch a Pylot from the land, which may bring you up to the towne Wybrough. It is there within in fifteen fathom deep, and good ſoft clay ground.

If you will (being come within the Rode-hell) ſaile up to Wybrough, then goe on eaſt and by ſouth a ſhot of a caſt peece unto a black point, leave that about two cables lengths on the larboard ſide, for there it is not cleane. Being a little paſt this black point, then go on N. E., or eaſtnortheaſt a halfe league, and then you ſhall come againſt a great white ſand-bay, but before you come by this ſand-bay, you ſhall meet a rock with a gray ſtone like a buye upon the Flyſtream, leave that foreſaid rock on the ſtarboard ſide, and the gray ſtone on the larboard ſide, and runne amidſt the channel through betwixt them both, there it is three fathom deep. It is no wiſedom to ſaile up there for him that hath not beene there before, but it is beſt to anckor a little within Rodehell, and to let him be brought up by a Pylot.

The Coaſt of Finland betwixt Elſenvos, and Wybrough.

THe Channell of Elſenvos lieth from Nargen or the Wolfe northnorthweſt and ſouthſoutheaſt about ſixteen or ſeventeen leagues, and from Wranger ſouth and north.

Rubben. Upon the weſt ſide off the channell lieth a high round rock, whereupon ſtandeth a maſt, or Warder, called Kubben, over againſt upon the other ſide of the channell lieth a long rocke or Iland called Sautum, and an halfe league to the eaſtwardes of Kubben lieth another great round rock called Mely. Theſe three rockes are the beſt marckes to be known of this foreſaid channell.

Sautum.

Mely.

Betwixt Kubben and Sautum lieth that channell in from thence northeaſt untill that you bee within the rocks, and then northnortheaſt and by eaſt, untill you come before the river of Elſenvos, there you may anckor betwixt the rockes in good anckor ground.

Elſenvos.

There runneth alſo a Liet through within the rocks, where you may ſaile alongſt, and come out againe into the ſea by Putsſagre, this runneth aboute very crooked with many bights, but it is Pilots water.

Borgo. If you will ſaile to Borgo, then runne a league to the eaſtwards of the foreſaid rock Mely, there you ſhall finde two high bare rocks, called the Tolcken, runne in betwixt them both, but neereſt to the eaſtermoſt, which is cleane and cleare cloſe to it, and lieth ſomewhat further to ſeawardes then the weſtermoſt. Weſtnorthweſt from this eaſtermoſt high rocke, lieth a little rocke above water, leave that on the larboard ſide. When as then you ſhall be by this eaſtermoſt rock, which you leave lying on the ſtarboard ſide of you, then goe on northnortheaſt to Schoeland, that is a rough Iland off from which lye many bare points, all which you muſt leave (with the Iland alſo) on the ſtarboard ſide, then run alongſt cloſe by theſe bare points. When you are paſt them, goe then northeaſt and by north, ſomewhat eaſterly, and ſo you ſhall ſee two other bare rockes, the eaſtermoſt off the greatneſſe off a ſhippe very ſteepe and high, but the weſtermoſt is ſmall, run in there betwixt them: the Sound is called Cramer-poort. When you are within them, goe then in north and by eaſt, and then you ſhall preſently meet with a greate Iland called Cramer, leave that on the ſtarboard ſide, and ſo you runne right on with an other greate Iland, called the Heſter, leave that on the larboard ſide, and anckor betwixt the two Ilands Cramer and the Heſter, there is good anckor ground.

Cramer-poort.

Cramer.

The Heſter

From the mouth of the Sound of Elſenvos to Peltingſound, the

Peltingſound.

the course is east, and east and by south, 11 or 12 leagues. Pelting-sound lieth in northeast, there you lye within a great many great rockes, or little Ilands, sheltred for all windes. You may sayle from thence through within the rocks al over where you desire to be, if you have a good skilfull Pilot.

From Peltingschares to Putsfagre it is five leagues. Putsfagre is a great rock, or Iland, lying from Highland north-northwest distant five or sixe leagues. About a league south from this Iland Putsfagre lyeth a suncken rock, which you must avoid. He that will sayle through within the rocks, let him take a Pylot from Putsfagre, that may bring him through the rockes where hee desireth to be: you may run in there every where, and within the rockes it is most all over good anckor ground.

Putsfagre.

From Putsfagre to the Epelschares, the course is east, seven leagues: these are a great many out rocks, a little to the eastwards of them lyeth a great rocke called Quadeschare which you may sayle round about.

Epelschares.

From Epelscharen to the Goeschare, the course is east 10 leagues. That and the lying of the land, and dangers from thence eastward, hath beene described here before.

Goeschare

How these lands doe lye one from the other, and from other lands.

From Derwinda to Luseroorte northeast and by north — 4 leagues
From Lyseroorte to Domesnes east northeast — 12 or 13 leagues
From Domesnes to Round east and by north somewhat easterly — 8 leagues
From Round to Duynemondt or the mouth of the river of Rye southsoutheast 16 leagues
From Domesnes to Rye or Duynemond southeast — 21 leagues
From Duynemondt to Lemsael or Sales northnortheast, — 12 leagues
From Duynemond, or the mouth of the River of Rye to the Iland Kin north and by west — 13 or 14 leagues
From Round to the Iland Kinne east and by north — 10 leagues
From Domesnes to the south ende, or the rode of Oesell N. W. 3 great leag.
From Domesnes to Ambrock northnortheast — 5 leagues
From Round to Ambroeck northwest and by north — 8 leagues
From the south ende of Oesell to Arentsbergh northeast, — 10 leagues
From Luseroorte to Howbrough VV. and by S., somewhat southerly 40 leag.
From Lyseroorte to the poynt of Alant or the Ilands northnorthwest 59 leagues
From the south poynte of Oesel to Honctsorte northnorthwest and north and by west — 16 leagues
From Hondtoort to the poynt of Dagerorte northnorthwest — 8 leagues
From Dagerorte to Syburghnes east and by north — 7 leagues
From Syburghnes to the Oxholme and Graholme northeast 4 or 5 leagues
From the Graholme to the great tree upon the southsoutheast — 8 leagues
From the northeast poynt off Oesell to Parno east & by south about 16 leagues
From Arentsbergh to the N.E. point of Oesell east and by S. 8 or 9 leagues
From Ambrocck to the northeast poynt of Oesell northeast somewhat easterly 9 or 10 leagues
From Round to the N.E. end of Oesell north, somewhat westerly 13 leagues
From Lemsael to Parno northnortheast — 9 leagues

From Dagerorte to the Roseh ad southwest and by south — 80 leagues
From Dagerorte to Eastergore southwest and by west — 37 leagues
From Dagerorte to the Godtsche sand west and by south — 27 leagues
From Dagerorte to Boechschaer westnorthwest — 21 leagues
From Dagerorte to the poynt off Alandt or the Ilands northwest and by north 20 leagues
From Syburghnes to Oetgensholm east and by north — 7 leagues
From Oetgensholm to greate Roge east and by north — 4 leagues
From great Roge to Surp east — 4 leagues
From Roge to Nargen east — 5 leagues
From the south end of Nargen to the Iland the Wolf, east and east and by N. 4 leagues
From Revell to the Wolfe north — 5 leagues
From Oetgensholme to the outrocks of Luys north and by E. 15 or 16 leagues
From Syburghnes to the channell of Abbo, or Uttoy northwest 20 leagues
From Uttoy or Abbo to the channell of Luys, the course is east 21 leagues
From Luys to the channell of Elsenvos e. and e. and by north 15 or 16 leagues
From Nargen to the channell of Abbo the course is VV.N.VV. 32 or 33 leag.
From Nargen or the VVolfe to the channell of Elsenvos northeast and by N. 16 leagues
From Nargen to the Out-rocks of Luys northwest and by north 13 leagues
From the VVolfe to Peltingschares N.E. somewhat easterly, or N.E. and by E. 20 leagues
From the channell of Abbo to Boeschaer southwest and by south, 16 leagues
From the Iland the VVolf to VVranger east and by south — 3 leagues
From the VVolf to the Kocxschaer east and by north — 3 leagues
From the Kocxschaer to the east end of VVranger, south and by east 1 league
From the Kocxschaer to little VVranger southsoutheast — 2 leagues
From VVranger to Eeckholm east and east and by south — 13 leagues
From Eeckholm to the Castle of Telsburgh eastsoutheast, — 5 leagues
From Telsburgh to the road of the Narve eastsoutheast, — 16 leagues
From the road of the Narve to the Russ. aecks north and by west 5 leagues
From the Russchaecks to the River Nioa, or Oreschalck, eastnortheast 13 or 14 leagues
From Oreschalck to the Rode-hell north and by east, — 15 or 16 leagues
From the Russchaecks to the Rodehell northeast and by north 27 leagues
From Russchaecks to the Iland Rette Sarre north — 5 leagues
From Rette Sarre to Sommers northnorthwest — 4 or 5 leagues
From Eeckholme to the Iland Highland eastnortheast — 11 or 12 leagues
From the west side of High-land to the road off the Narve southeast and by S. 18 leagues
From Highland to the little Tutters south — 3 leagues
From Highland to the great Tutters south — 3 leagues
From the Iland with the Mast to the little Tutters east and by south 3 leagues
From the Kockschaer to the Iland with the mast east and by south 16 leagues
From the Iland with the mast to the Highland northeast and by east 4 leagues
From the Kockschaer to high land east — 23 leagues
From Highland to the Sommers east — 7 leagues
From the Sommers to the Goeschaer or great Fisher, northeast somewhat easterly — 7 leagues
From the great Fisher to the little Fisher northeast and by east, 3 leagues
From the little Fisher to the Corsnes eastnortheast somewhat easterly 1 league
From Corsnes to the Rode-hell northeast and by north — 3 leagues
From the sound of Elsenvos to Peltingsound eastsoutheast 11 or 12 leagues
From Pelting-sound to Putsfagre east — 5 leagues
From Putsfagre to the Epelschaer east — 7 leagues
From the Epelschaers to the Goeschaer or Great Fisher, east 10 leagues
From Eckholm to Elsenvos northwest and by north — 16 leagues
From Highland to Peltingschares northwest and by west — 8 leagues
From Highland to Putsfagre northnorthwest — 7 leagues

How these Lands doe shew themselves at sea.

Domesnes Doembergh. Lyseroort.



Coerland sheweth it selfe in this forme, betwixt Lyseroort and Domesnes, when you saile alongst by it.

Domesnes Doembergh Lyseroort Derwinda. Backovens Towards Der Lyba.



Thus sheweth the coast of Coerland, from Domesnes past Derwinda, and the Backovens towards Der Liba.



When you saile about Domesnes, then Oesell sheweth it selfe thus



The little Iland Ambroeck.



The Iland Round, when you sayle alongst by it, sheweth it self thus.



Round.

Doembergh Domesnes.

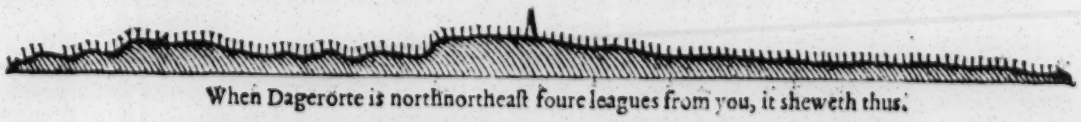


Thus sheweth Coerland to the eastwards of Domesnes.

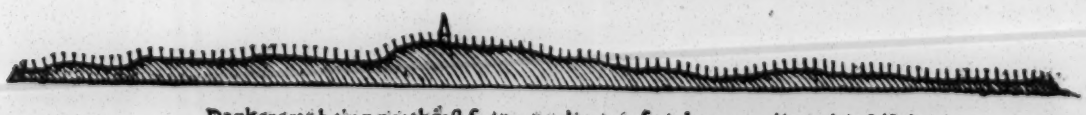
Castle of Dunemondt Rye The high land of Kowerwyck.



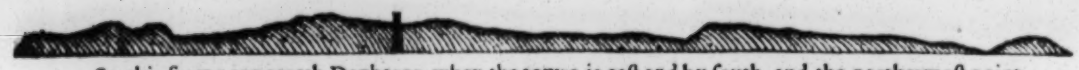
The mouth of the Duyn.
When you come against the mouth of the Duyn, the River of Rye, the land sheweth it self on both sides of it thus.



When Dagerorte is northnortheast foure leagues from you, it sheweth thus.



Dagherorte being northeast from you three or four leagues, sheweth it self thus.



In this forme appeareth Dagheror, when the towre is eaſt and by ſouth, and the northermoſt point is eaſt from you 4 leagues, and then you may even ſee it in clear weather from below.



When as the towre upon Dagherorte is S. E. and by S., and the land to the eaſtwards of it is S.E. 4 leagues from you, then it sheweth it ſelfe thus, Syburghnes.



When the towre of Dagherorte is ſouthſoutheaſt from you, then it sheweth it ſelfe (with the land to the weſtwards of it) thus.
Syburghnes. Dagherorte.



High-hill Thus sheweth the land of Dagheroort towards Syburghnes.



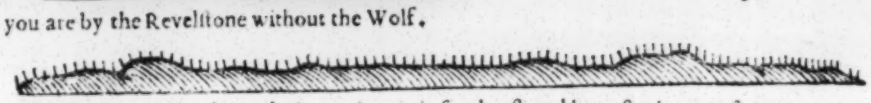
Thus sheweth Syburghnes when the high hill is Southſouthweſt 4 leagues from you, there it is 35 and 36 fathom deep.



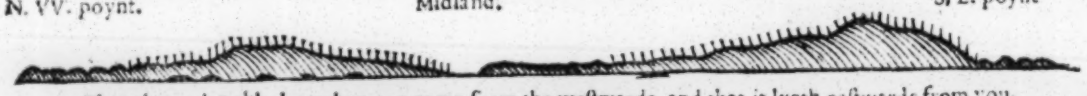
Thus sheweth Revell when you are by the Revelſtone without the Wolf.



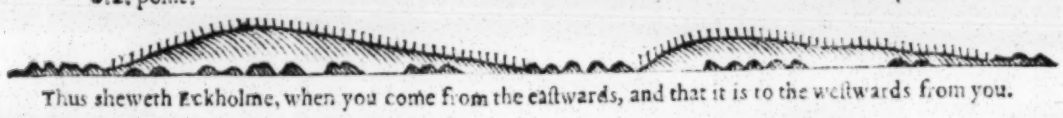
The forme of Oergensholme.
N. VV. poynt.



The Iland Wranger sheweth thus, when it is ſoutheaſt and by eaſt 3 leagues from you.
Midland. S, E. poynt



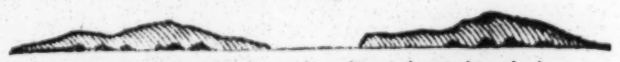
Thus sheweth Eckholm, when you come from the weſtwards, and that it lyeth eaſtwards from you.
S.E. point. N. weſt point.



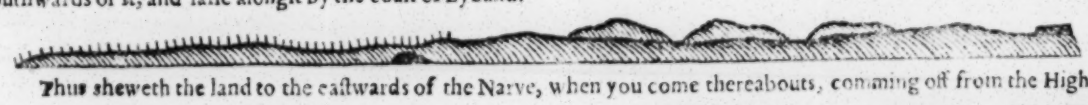
Thus sheweth Eckholme, when you come from the eaſtwards, and that it is to the weſtwards from you.



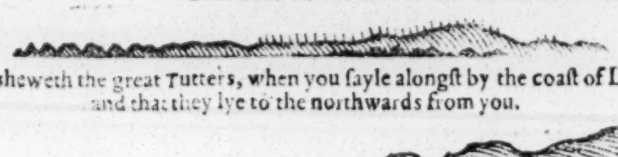
In this forme sheweth the Iland the Hufres, when you are to the ſouthwards of it, and ſaile alongſt by the coaſt of Lyfland.



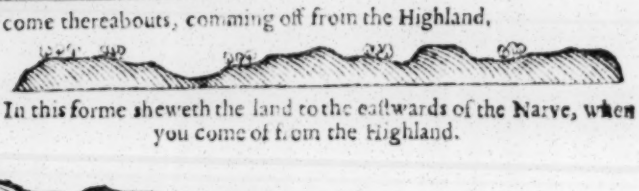
The little Tutters shew themſelves thus, when the lye to the northwards from you.



Thus sheweth the land to the eaſtwards of the Narve, when you come thereabouts, comming off from the Highland.



Thus sheweth the great Tutters, when you ſayle alongſt by the coaſt of Lyfland, and that they lye to the northwards from you.



In this forme sheweth the land to the eaſtwards of the Narve, when you come of from the Highland.



Thus sheweth the Iland High-land, when you ſee it comming from the weſtwards.

The fourth Demonſtration,

Where in are ſet forth of Gothland and Oeland, as alſo Swet-land coaſtes, untill you are paſt Stockholme.

FRom the ſouth-end of Oeland to the ſouth-end off Gotland, the courſe is eaſtnortheaſt 23 or 24 leagues, but to the Karels northeaſt 27 leagues.

The courſe alongſt the fairewaie, for to ſayle from the ſouth end of Oelandt through betwixt Oelandt and Gotlandt, is northeaſt and by north.

The Iland Oelandt is twenty four leagues long, and a league and a half broad, when men ſayle alongſt by it, they may counte eighteene towers upon it, which are all flat: the eaſt coaſt is a clean coaſt, and lyeth northnortheaſt and ſouthſouthweſt, but about 7 or 8 leagues to the ſouthwards of the north-end, there shooteth off a little riffe, thwart from the land a great half league into the ſea, which men muſt avoyd: by it goeth in a little haven, where indifferent ſhipps may goe in, otherwiſe Oeland hath no havens.

From the ſouth end of Gotland runneth off a foule ſtony riffe, a good wayes into the ſea, you may run about by it upon the lead in ſeven, eight and nine fathom.

The great Karell. Little Karel

The Karels are two little high Ilands, lying on the weſt ſide of Godland north and by weſt about ſeven leagues from the ſouth poynt of Gotland, eaſt and weſt, about a halfe league one from the other, the greateſt is called the greate Karell, and lyeth a great league from the land: the ſmalleſt, the little Karell, and lyeth about a halfe league from the ſhoare. When you come from the ſouthwards, the greate Karell sheweth it ſelfe in two hommocks, and the little Karel in one hommock, and neerer to the land. Under the little Karell is round about good roade, in eight, nine and ten fathom, and is round about cleane and cleare, without foule grounds. Men doe anckor betwixt it and the land, in ſixe or ſeven fathom, there it is good lying for all windes, as well for them that are bound to the eaſtwardes, as to the weſtwards. He that ſhall be to the northwards of Gotland, and ſhall get a contrarie wind, you may alſo anckor under the great Karell, but under the little Karell is farre the beſt roade. Under the great Karell men may anckor, on the weſt and eaſt ſide, but on the north and ſouth ſide it is foule, therefore come no nearer it by night, then in eleven or twelve fathom. Betwixt the two Karels it is thirteen and fourteen fathom deep.

Boſwyke.

About halfe wayes betwixt the Karels and the ſouth end off Gotland, ſouthſoutheaſt from the Karell, lyeth the haven Boſwyke; thwart of it runneth off a riffe, a good wayes from the ſhoar, come no nearer it then in ſeven or eight fathom. When you are thwart of the aforeſayd ſouth point, about a halfe league from the land, and will ſayle alongſt to the northwards of Gotland, you muſt not ſayl on more northerly then northweſt, as well for to avoyd that riffe of Boſwyke, as for to ſayle aweather the Karels.

Reefholm

Three or four leagues northweſt from the Karel, lieth the Iland Reefholm, thwart of it men doe run into Weſtergorte: you may ſaile and anckor round about it. A litle to the northwards of it lyeth the northweſt point of Gotland.

Two leagues to the northwardes of the high poynt lyeth the towne Wiſbuy, about 7 leagues northeaſt from the Karell. Men were wonte in old tyme to lye there behind a greate head or Cheſt.

Wisbuye.

Wiſbuye hath beene in tymes paſt a famous marchant towne, where was wont to be driven great trade of marchandize, but it is now through the will of God, altogether fallen down, and come to nothing. The Hance towns have a long time there held their ſtaple. The old Sea laws were made there, and alſo the old famous Read-carde. Men may ſee yet to

De Custen van Sweden
tusschen Calmer en
Landsoort
't gat van Stocholm.

Nycoppen
Suyder Coppen
Schelsyr
Westerwyck
I. Vrouwenbergh
Fluicerbur
Stickholm
Calmar
Gotlant
OELANDT
Munsteraas
Schenckenes
Swedsche Lantsers
Deutsche mylen van een graedt
Spaensche mylen 4 in een Graedt
Eng. en Fr. mylen 20 in een Graedt

Stocholm

Caarte
van't
Stocholmse
Liet.

Duytsche mylen 15 in een Graat
Spaansche mylen 17½ in een Graadt
Engelsche en Fr. mylen 20 in een Graadt

N 23
37 58

MUSEUM

to this day many old ruinous houſes of coſtly marble and hewen ſtones, whereby men may partly perceive and judge, what manner or ſtalteneſſe there hath been.

From Wiſbuy the coaſt lyeth forth N. E. towards the end of Gotland about 9 leagues. But from the Karell to Gotſhe ſand the courſe is n e. 21 leagues: there is a little Iland, whereupon dwelleth no people, and ſtandeth ful of trees: you may ſaile round about it, which hath a white ſtrand. From the N.W. point thereof ſhooteth off a little riff, and likewiſe one from the ſouth point, a good waies off into ſea, towards the north end of Gothland. On every ſide of Gotſche ſand, you may ancker in 6, 7, 8, 9, 10 and 12 fathom, all clean and good ancker ground, but theſe foreſaid riffes you muſt avoide. It lieth n.n.e. 7 leagues diſtant from Faro, the north end of Gotland, when you lye there under it at ancker, you can not ſee Gotland.

The Copper ſtone lyeth from Gotſche ſand weſtnorthweſt and northweſt and by weſt diſtant three great leagues.

Upon the ſouth end of the eaſt ſide of Gotland ſtandeth a high tower, called Howbrough, and thereafter the ſouth end of Gotland alſo is called Howbrough. By it goeth in a little river, before which you may ancker in ſix or ſeven fathom.

Five leagues northeaſt from the aforeſaid ſouth point lyeth Heyligh-holm, which is a good haven, but by reaſon it is but little uſed, it is therefore alſo but little known.

Two leagues to the eaſtwards of Heyligh-holme lieth the haven of Narwyck, upon the eaſt ſide of the Haven lieth a long rock, by which you muſt run in, and leave another ſharp rock on the larboard ſide, within the haven you may ancker in foure or 5 fathom.

Two leagues to the eaſtwards of it lieth Sandwyk which is a good haven for a weſt, northweſt, north, eaſt, and ſoutheaſt winde, and lieth in about north, a ſouth winde bloweth there open in: On the eaſt point, (which is a low bare point) lieth a Holme, which is faſt to the land, upon it ſtandeth a Warder: From this point runneth off a little ſandriffe, which you may ſound about in 5 or 6 fathom. Within at this Holm is a bridge of Maſts which lyeth off a little from the ſhoare. If you will ankor there in the Haven, then run in alongſt by the eaſt ſhoar, until you come within the bridge, and anckor there neareſt the eaſt ſhoare, ſo that the foreſayd eaſt point do ſtand ſoutheaſt, or ſoutheaſt and by ſouth from you, in 4 fathom, 4 and a halfe, or 5 fathom, there is cleane clay ſand ground, and very good lying for weſt, north and eaſt windes.

Eaſtergore. A league to the eaſtwards of Sandwyck, lieth the Iland of Eaſtergore, about halfe waies betwixt both the ends of Gotland n.e. from the ſ.w. poynt, this is a bare Iland, without trees Under this Iland is very good road for all windes as well for them that are bound to the eaſtwards, as to the weſtwards. Comming from the weſtwards, or from Sandwycke alongſt by the land, then is the n.w. point, (which is a high bare gray point) hidden behinde a point of the maine land of Gotland, ſo that it ſemeth a farr off to be no Iland, but comming near it, it openeth it ſelf, that you may ſee large enough thorow betwixt them: ſayle in there betwixt thē both, in the midſt of the channel, it is there clean and clear, but ſomewhat uneven of ground, to wit, 8, 10, 12 and 14 fathom, but you need not to feare. If you will ancker under it for N.E. or E. winds, then ancker betwixt the land & the Iland, ſo that the aforeſaid bare gray northweſt point ſtand north, and the ſouthermoſt eaſt from you, in 9 or 10 fathom. Or if you wil anckor for a ſouth, ſouthweſt, or weſt winde, then run further in about by that aforeſaid bare gray poynt, bring it ſouthſouthweſt from you, and anckor there in 7, 8, 9, or 10 fathom, there it is clean ground of ſmal white and black ſand. A little to the northwards of the Iland is a great Bay on Godland, there you may alſo ankor in 7 & 8 fathom, for weſterly winds.

If you will ſayl in or out, to the northwards of Eaſtergore then com not very near the Iland, becauſe there lieth off a riffe from the eaſt point farre into the ſea, which is a great half a league without the land, not deeper then 2 fathom & a half ſtony and very uneven, & is to be thought, that nearer to the land it is ſhoulder & fouler. From the S.E. ſide runneth off alſo a flat, a good wayes to Seawards, at ſome places not deeper then 3, 4, & 5 fathom, & alſo very uneven, whereof you muſt take heed.

Four leagues north and by eaſt from Eaſtergore lyeth a haven, called Sliet or Sliet haven, lying in north and north, and by weſt, behinde ſome litle Ilands, there it is good lying for eaſterly, weſterly, & north winds. Upon one of the northermoſt litle Ilands ſtandeth a ruinous church. You muſt come in there alongſt by the ſhoare from the ſouthwards. From thence to Faroſound the coaſt lyeth north and by weſt two leagues.

Faroſound you may run into, in 2 and 3 fathom water, there ſtandeth a Church with a flat ſteeple upon the land. From Faroſound lyeth a foule dangerous riffe, a league and a halfe, or a leag. into ſea, called Salfouteyn, you muſt take very good heed thereof, when you wil run about to the northwards of Gotland.

From Paroſound to Gotſcheſand, the courſe is northnorth-eaſt, about ſeven leagues.

A halfe league to the northwards of the Towne Calmer, to wit, a little to the northwards of the road lyeth an Iland, called Skalloe, which you muſt leave on the ſtarboard ſide, when you are bound from Calmer to the northwards: It is indifferent cleane upon the weſt ſide, but from the Sweeds ſide there over againſt it runneth off a ſtone riff, almoſt unto the Iland. Upon this riffe ſtandeth commonly a ſtone-beacon it is dangerous to ſaile through there, or over that ſhowld, for one that is not there very well acquainted. It is alſo Pilots water. Skallo.

Foure leagues to the northwards of the Calmer, on the Sweeds ſide, lyeth an out-poynt, called Schenknes, or Skegneſſe, thwart of it lyeth a ſmall-Iland, called the Baker; betwixt this poynt and Skallo it is very uneven of depths. Skegnes. The Baker.

About two leagues more northerly over againſt it, on Oeland lyeth Borckholm, a little to the northwards of it lyeth Copingwyke, where men do lade many Toomb-ſtones and other ſtones, with a northerly winde it is bad lying there. Borckholm Copingwyke.

Northweſt or ſomewhat weſterly from Borckholm, about three leagues on the Sweeds ſide, lyeth a haven in the rockes, where men doe lade Beames, to the northwards of it, N.W. & by N. from Borckholm lyeth Munſteraas, that is a good haven alſo for very great ſhips. Munſteraas.

From Calmer to the Sweeds-louſer, the courſe is northnortheaſt nine or ten leagues, this is a round rock, and very high, you may ſee it alongſt over Oeland, being a good wayes to the eaſtwards of Oeland, it is not very great, but clean round about, ſo that you may anckor neare under it on every ſide in 18 and 19 fathom, but by reaſon that it is not broad there cometh in (with hard windes) a rowling Sea. Sweeds-louſer.

From the Sweeds louſer to the channell of Weſterwyke, or Silbuy, the courſe is northnorthweſt 8 leagues, but from Northeroorden the north-end of Oeland northweſt nine leagues.

The channell of Wetterwyke and Silbuy is called Idefound, after a great rock lying on the north ſide of this channell, called Idehoe, off from it lye many rocks, ſome above and ſome under water two great leagues to ſeawards which are called the Idebanks. Idefound. Idebancks

He that will ſaile from the north-end of Oeland towards the barſound, and by bare windes doth come a little to the weſtwards, without the right faire way, muſt be very carefull, and take good heed that he get not in amongſt them.

For to know the channell of Weſterwyke, you ſhall ſee a high bare rock, bring that northweſt from you, and ſayle ſo right it, and then you ſhall fall with the land right before it, and then alſo you ſhall eſpy another bare rock, whereupon ſtandeth a Fiſhers beakon, and alſo another to the ſouthwards of it, with a maſt, ſayle in betwixt the two rocks, the channell lyeth in N.W. and N.W. and by N., when you are come within them you may ſayle alongſt through the rocks, where you deſire to be, to Silbuy, Strutholm, Flurbuy, Vrouwenbergh, Weſterwyke, up to the northwards to Schelſuyt & other places more there it is al clean ground, & 12, 15, 18, and 20 fathom deep.

If you be bound to Silbuy, then ſaile up to the northwards or eaſtwards untill you come before the towne, and ancker there in the middeſt between the rocks in 7, 8, and 9 fathom. Silbuy.

If you be bound to Flourbuy, or Vrouwenbergh, then ſayle in weſt, and weſt and by north through the rocks till you come againſt the maine land, there you may ancker before Fleurbuy, or ſayle up northweſt betwixt the Iland of Vrowenbergh and the maine land, and anckor there in 12 fathom, alſo you may run through that way until you come to Weſterwyke. Weſterwyke lyeth from Silbuy through within the rocks weſt, and weſt and by north, there it is in the faire waye fifteen and ſixteen fathom deep. Fleurbuy. Weſterwyke.

From Silbuy to Schelſuyr it is northnorthweſt 7 leagues, al alongſt through within the rocks. Schelſuyr is a good haven, there lyeth a rock in the havens mouth, about which you may run in on both ſides, and anckor before the town. Schelſuyr.

To the eaſtwards of Schelſuyr lyeth the Houdtsbay and the Green Iland, there it is alſo good anckoring. You may run from Silbuy alongſt by it untill you come in the Sound of Southercoppen and Northercoppen. Houdtsbay Green-Iland.

From the channell of Weſterwyke to the Barſound, the coaſt lieth alongſt by the rocks N. and by eaſt 8 leagues. But from the N. end of Oeland to the Barſound the courſe is N. and by weſt 16 leagues, go not more weſterly, that you get not into the ſuncken rocks and foule grounds of the Idebanks.

The north end of Oeland runneth ſomewhat farre off flat. If you runne out cloſe by Oeland, and ſayle on north and by weſt,

weſt, then you run alongſt farre enough without the Idebanks, and ſo ſhall fall with the land about a halfe league to the ſouthwards of Barſound againſt a deal of low out-rocks. It ſeemeth a far off (by reaſon of the multitude of rocks and little Ilands to be all firme land, but comming near it, it is all broken. You ſhall ſee there alſo an Iland by which there ſeemeth to be a channel, but you muſt be further to the northwards, run alongſt by the coaſt in ſeven fathom, ſo long until that you ſee out a head high out-rocks, theſe ſhal be the Heerſcharen, which are very foule, and lie off from the north point of the channell, a good waies eaſtſoutheaſt into ſea, al which you muſt leave on the ſtarboard ſide, and run alongſt by them unto the channell.

Barſound.

Heerſcharen.

When as you come out of the ſea, you muſt take very good heed, that you fall not with the land to the northwards of the channell, that you do not get into the foreſaid Heerſcharen. When you come before the channell, you ſhall ſee 2 Sounds or goings in, the ſouthermoſt ſemeth to be the broadeſt & faireſt, but the northermoſt is far the beſt, & lieth in northnorthweſt.

On the n. ſide of the channel lieth a great rock with a beakon upon it, and ſomewhat more to the northwards ſheweth a round hil, by all which marks this channell is very good to be known, whē as you are right before the norther channel, & do ſee open into it, then ſaile it northn. w. ; being come in about aſhot of a caſt peece, you ſhal ſee on the larboard ſide 2 little low Ilands, anckor within them in 17 or 18 fathom, there you muſt hire a Pilot to bring you up, either to Southercoppen, or Northercoppen, where you deſire to be, it is Pilots water. It is from thence to Southercoppen, about 10 leagues, but to Northercoppen 18 leagues. In the comming in of the Sound is good anckor ground in 10 fathom. Within in the Sound it is broad and wide, and all over good anckoring in 18 and 20 fathom.

Talderſound.

About an Engliſh mile within the Sound you leave (in ſailing up) the Talderſound on the larboard ſide, there is no more then ſix or ſeven foot water, from thence you edge up north and alſo northeaſt a half league, then again weſt and by ſouth about two leagues, afterwards weſtnorthweſt a league unto Karholm, which is a Gentlemans houſe with a mill.

From Karholm to Stickbrough is further weſt about two leagues, that is a caſtle upon a little Iland, you muſt go about to the ſouthwards of it through a bridge.

Stickborg.

From Stickbrough ſaile up alongſt the Sound, & leave moſt of all the rocks (which you ſee) on the larboard ſide, except one or two a little above Stickbrough, leave them on the ſtarboard ſide. About two leagues paſt Stickbrough ſtandeth a Gentlemans houſe called Mem, there is the place where men do lade, a half league from Southercopping.

For to ſaile from without the Northercopping, you muſt run in by the Swartboden up weſtwards unto Schenes and Braburch, & alongſt unto the Brawyk the ſound of Northcopping, or elſe you muſt come in at the Barſound through within the rocks into the Barwyke unto Northercopping, but it is not to be done without a Pilot for them that are not there very well acquainted, for it is Pilots water.

Brawyke.

Hevering.

From the north end of Oeland to the channell Nycopping by the Hevering, the courſe is due north about 12 leagues, but if you run cloſe alongſt by the end of Oeland, you ſhall fall with the land a little to the weſtwards of the Hevering. The Hevering is a great reddiſh bare rok, whereupon ſtand 3 or 4 Fi ers beacons, heretofore there was wont to ſtand upon it a barrell upon a maſt, which men migt ſee far off at ſea, but it is taken of in the laſt was between the Kings off Sweden and Denmark, now there ſtandeth nothing upon it but ſome Warders.

Swartboden.

Two great leagues to the weſtwards of the Hevering, to wit, weſtſouthweſt from it, lie the foreſaid rocks called the Swartboden, which are great rocks, and are ſometimes miſtaken for the Hevering, you may ſaile in alſo by theſe Swartboden, and run through within Oxelen & the other rocks, & come by the point of the Hommelwyke into the right ſound of Nycoppen.

When you come before the channell of the Hevering, you can at firſt hardly ſee a channell, or any opening, but bring the great rock the Hevering n.w. from you, and ſaile ſo right in, & run in cloſe alongſt to the northwards of it. In the ſailing in you ſhal ſee two channels, the northermoſt is within ful of dangers, ſo that you can not go through there. The right channel by the Hevering is ſo narrow, that you can hardly turne to and again there.

From the Hevering you muſt ſaile in firſt northweſt a league & a half, or two leagues, unto a great rock, leave it on the ſtarboard ſide, and ſaile about by it, and goe in alongſt northweſt and by north. A little within the foreſaid great rock, thwart of the point of the Hommelwyke, you ſhal finde alſo a great rock on the ſtarboard ſide, you may run about to the weſtwards of it untill you come within the other rocks and little Ilands, and anckor there in three fathom ſoft ground: but if you wil anckor there, then you muſt ſhun ſomewhat the weſt end of the great Holm, becauſe of a ſuncken rock that lieth even without the point of the rock. From that foreſaid road unto Haſſell-holm the courſe is yet in alongſt northweſt and north; but with ſhips of great draught you muſt anckor before the channel of Haſſel-holm. From the Hevering to the Haſſell-holme it is in all about three or four leagues.

Hommelwyke.

From Haſſel-holm alongſt upwards through the ſtone reach, it is not deeper then nine foote, you muſt alſo (if you will ſaile up there) firſt ſet the rockes, or ſuncken rockes with beakons with your boat, or elſe you ſhould ſometimes ſaile upon ſome of the rockes in 7 foot depth. The narroweſt of the Stone-reach is thwart of an Iland which you muſt leave on the ſtarboard ſide, of from which lieth a ſuncken rock in the narrow, you muſt goe cloſe alongſt by the ſuncken rock, for to the weſtwards of it is very ſhould water. Being paſt this ſtony ground, you ſhall get oaſie ground, where it is not deeper then ſixe foot; being come over that by the town Nycopping, it is again eight foot deep, but ſtony ground. The ſhips lie without the towne thwart of the beakons over againſt the Caſtle, which lieth on the weſt ſide of the river.

Haſſell-holm.

Stone-reac.

Nicopping.

From Haſſell-holm to the town Nycopping it is about a league firſt up north and by weſt, and afterwards weſt. For one that is unacquainted, it is not well to ſaile up, it is alſo Pilots water, ſo ſoone as you come within the channell, you can get a Pilot to bring you, where you deſire to be.

From Nicopping you may ſaile alongſt through the rocks to the northwards off Haſſell-holm unto Troſa and Telghen.

Landſoort (which is the weſt point of the Liet of Stockholm) liet a from the Hevering eaſtnortheaſt diſtant 7 or 8 leag.

Landſoort

About halfe wayes betwixt both liet a great high rock very good to be knowne, a good waies without the land alone called Hartſoe, & a litle league to the weſtwards of Landſoort lye alſo ſome foule out-rocks, called the Heyrhamer. When as you ſail from the Hevering on E.N.E., then you run alongſt a little without the Hartſoe, leaving it on the larboard ſide. With that courſe, you can not alſo ſaile ſo neere the Heyrhamer, and then you leave it lying alſo on the larboard ſide towards the land.

Hartſoe.

Heyrhaven.

The land to the weſtwards of Landſoort lieth weſt, or w. & by ſouth, with divers great rockes and havens where you may ſaile into. About a league to the weſtwards of it lieth a haven within a low rock in betwixt two other low Rocks, there you muſt make you faſt with cables on both ſhoares, and with an anckor in the Sound. Before the havens mouth lieth a high round rock, which ſtutteth the havens mouth.

A little to the weſtwards off Hartſoe goeth in a haven or Deep, where you may run through with Barkes within Elſnap unto Stockholm.

A little to the weſtwards of that Deep lieth the Sound of Telghen lying in northweſt, allmoſt unto the great Lack de Meiler, upon the end of that Sound lieth Telghen, but at the mouth of the Sound lieth the little towne Torſa.

About an Engliſh mile ſouthweſt from the point of Landſoort, lye two rockes even with the water, and within theſe rockes cloſe by Landſoort lieth alſo a ſuncken rock. He that commeth from the ſouthwardes, being bound to Stockholm, and falleth with the land to the weſtwards of the poynt off Landſoort, muſt take heed off them; you may ſaile within theſe two rockes (lying even with the water) to wit, betwixt them and the foreſaid ſuncken rock, and alſo (as the Pilots ſay, you may ſaile through within the ſuncken rock, that is, betwixt the ſuncken rock and the mayne land.

Landſoort and the north point of Oeland lie ſouthſouthweſt and northnortheaſt diſtant three and twenty or foure and twenty leagues. If you ſaile on northnortheaſt from the northend off Oeland, you ſhall fall with the land right with Landſoort or a little to the eaſtwards of it. It is better to fall with the land ſomewhat to the weſtwards of it, then to the eaſtwards of it, to the weſtwards the land is better to knowne then the rockes to the eaſtwards off it. Therefore when as you wil ſaile from the north end of Oeland to Stockholm, eſpecially in dark wether, goe on ſomewhat more northerly then northnortheaſt, or north and by eaſt, and then you ſhall runne ſight of the foreſayd rock Hartſoe, which is good to beknowne.

The Liet of Stockholme goeth in northeaſt by the point of Landſoort. About a league eaſt from the point ly ſome black rocks, ſome above and ſome under water, called the Karwaſen. Betwixt them and the point, about once ſo neare the Karwaſen, as the point, lieth an other black rock, not great, called the yong Karwaſen, betwixt that rock and the point off Landſoort, men doe ſaile into the channell of Stock-holm. Cloſe to the point lieth alſo a ltle Iland which you muſt leave on the larboard

ſide,

Wigſtone. ſide, and run alongſt to the eaſtwards of it, a league northeaſt from the point lieth the Wigſtone, lying ſoutheaſt or eaſtſoutheaſt thwart off from the ſhore. This a ſomwhat a long rock with three hommocks, the two weſtermoſt are the greateſt, and ſhew like a ſaddle, the eaſtermoſt hommock is the ſmalleſt, upon it ſtandeth a little walled cape, you muſt ſayle alongſt to the eaſtwards of it, and leave the rock on the larboard ſide. You may well ſayl alſo about to the weſtwards of this Wigſtone, it is cleane round about, but on the weſt ſide it is narroweſt, betwixt it and the land lieth alſo a rock, with a little rock of from it, which you muſt avoyd,

Middle-ſtone. A league northeaſt from the Wigſtone lyeth the Middle ſtone, which is a great high rock with a great cliff or ſaddle with another great rock a little to the weſtwards of it: you can not ſaile through betwixt them, they are faſt one to the other with rockes. In ſayling up men leave this Middleſtone on the ſtarboard ſide, and run about to the weſtwards of it.

From by eaſt the Wigſtone to the Middle-ſtone, to wit, alongſt to the weſtwards of it, the courſe is northnortheaſt. A-

Gomberg ſtone. bout a great Engliſh mile eaſt from the Wigſtone, and north from the Karwaſen lieth another rock, called the Gomberg-ſtone, and to the eaſtwards of it another, called Schaeropen. When you ſaile from the Wigſtone to the Middleſtone, you leave them both on the ſtarboard ſide.

Ramskloof. Thwart of the Middleſtone, on the Weſtland lieth the haven of Ramskloof, there you may anckor within the rocks. The Middle-ſtone lieth about a halt league ſouthweſt from the eaſt point of the Liet, to wit, from the eaſt point off the main land,

Danske-channell. or the Swedes ſchares, betwixt them both goeth in a channell, called the Danske channel. For to ſaile in there you muſt avoid the foreſaid eaſt point a good wayes off (whereupon ſtandeth a mil) and run in by the Middleſtone, or from that point runneth of a great ledge of rocks a good wayes to ſeawards, towards the Middleſtone. From by weſt the Middleſtone to Elſnap, the courſe is northeaſt three leagues.

When you are a little paſt the Middleſtone, you come in be-

Redcow. twixt the 2 lands, & a little within the eaſt point you ſhall meet with a rock in the fareway, called the Red-Cow. You may ſaile about it on both ſides, but men leave it commonly on the ſtar-

Elsnap. board ſide, within that rok, that is on the n ſide you may ankor.

Elſnap is a haven behinde 2 litle Ilands, where the Kings ſhips of wart do commonly lye to tarry for a winde, when they are bound to ſea, there it is very good lying, when with contrary windes you can neither get up nor down, you can come in and out there both from the northwards and from the ſouthwards very conveniently. Comming from the ſouthwards, you can ſee over the ſouthermoſt little Iland, the maſts of the ſhips that lie behind it. For to ſaile in there behind it, run in about by the ſouth point of the Iland Elſnap behind it, and then you leave a little black rock on the ſouth ſide of the havens mouth, lying on the larboard ſide. Betwixt the 2 litle Ilands of Elſnap runneth alſo a channel through where you may go through with Huyes

Redholm. and ſmal ſhips. From thvvart of Elſnap, the courſe is nvvards n. n. e. about 2 leagues, to the Red-holm, that is a great Red round rock grovvn full trees, to the vveſtvvardes off it lyeth another ſmaller bare rock, the farevvay is ther in through betvvixt them, & about a muſket ſhot broad. In this narrovv it is all over good anckor-ground. From the north end of the Red-holm lieth off a great rovv off rockes unto the eaſt ſhore of the Liet, vvhere you muſt ſaile through. When as you ſaile through betwixt the Red-holm and the foreſaid bare rock to the eaſtwards of it, go then on yet about an Engliſh mile further n. n. e. untill you come thwart of the fourth channell to tell off from

S. Johns channell. the Red-holm, which lieth through the foreſaid row of rockes to the northwards of Redholm, that is called S. Johns channel, it lieth through about n. n. w., or ſomewhat more northerly, it is a ſhort Inlet, run through there. Being through S. John channel, goe again n. n. e. about an Engliſh mile to the Red holm,

Redholm. which is a long rock upon it ſtand 3 barrels upon maſts, this you muſt leave on the larboard ſide, & run alongſt to the eaſtwards of it. From the north point of that Red-holme runneth of a litle

Great Daler. riffe or ſhowld, which you muſt avoid. From the Redholm unto the great Daler, the courſe is n.w. and by north, that is a haven on the weſt ſide of the Liet, there lieth a Church-yard within on the land, where the ſlain Poles people in the laſt Polliſh wars lye buried. Thwart of that Church-yard is a Sandbay, there is good anckor-ground, like as is all over in that foreſaid haven.

Saltſack At the north point of the haven the great Daler lieth a ſuncken rock cloſe by the land, called the Saltſack, upon which is no

Little Daler. more then 9 foot water. From the great Daler, the courſe is alongſt n. e., a half league unto the little Daler, which is a high ſteep rock, the higheſt that you find amongſt all the rocks in the Liet, run alongſt to the weſtwards of it, and leave it on the ſtarboard ſide. Over againſt it on the weſt-ſide lieth another rock, which is called alſo the Daler, to the weſtwards of it, to wit, betwixt that rock and the main land, is alſo an opening,

Hartſtick. where you may ſail through. A little within that foreſaid rock on the weſtland goeth in the Hardſtick which is a Sound that lieth in firſt weſt, and weſt and by north, a good waves in, and then northweſt and cometh into the Liet to the northwards of Waxholm, by Kingshaven Majeſty hath cauſed to ſink ſome ſhips in the mouth of the Sound, ſo that men can not goe through there with great ſhips, but onely with litle barks. From

Steendeur the little Daler, the courſe is n. n. w. about a halfe league to Steendeur, a great Iland, which you muſt leave on the ſtarboard ſide, and run cloſe alongſt by it, and ſo you ſhall leave a round rock to the ſouthwards over againſt it on the larboard ſide, and ſaile through betwixt them: this channell lieth through n. w. At the weſt end off the great Iland Steendeur lieth a litle black rock, you muſt run about by it again to the eaſtwards.

Kowhaven From Steendeur to Kow-haven, the courſe is eaſtnortheaſt two leagues, that is a rock lying in the broad Sound, leave it on the ſtarboard ſide, and ſayl to the weſtwards of it alongſt by the weſt land unto Berck-haven. Betwixt both about half wates lieth a haven, called the Croſſe-haven, there it is good lying for weſt and northweſt wind.

Berkhaven Berck-haven lieth from Cow-haven northeaſt and by north diſtant about two leagues: this is a haven betwixt two Ilands where is good anckoring for all wind, as well for them which come from Stockholm, and deſire to ſaile to the Northbodem, as alſo for them that will ſayle of towards Landſoort, there is (like as at moſt places betwixt the rocks and Ilands) good clay ground. When you come from Kowhaven, and are bound to Stockholm, you muſt leave theſe two Ilands of Berck-haven on the ſtarboard ſide, and run in about betwixt them and the

Deurhaven. point of the maine land. From the narrow betwixt Berck-haven and the foreſaid point to Duer-haven, the courſe is northweſt about a halfe league. On the ſouthweſt ſide of that fareway thwart of the poynt over againſt Duer-haven, lye two ſuncken rocks on each ſide of the point one, the one on the northweſt ſide, and the other on the ſoutheaſt ſide, commonly there ſtandeth upon each of them a little tree for a beakon.

Draybom From the poynt of Duerhaven unto the Draybome, the courſe is ſouthweſt and by weſt ſomewhat weſterly about a half league, it is called alſo the Duer-haven, of from the point within the Ilands untill you come before the buye, alongſt there, and alſo within the Ilands, it it good lying every where.

The little Ilands vvhich lye in the channell of the Draybome, you muſt leave them on the ſtarboard ſide of you.

Windſtream. From the Draybome to the Windſtream, the courſe is firſt north, and north and by vveſt untill about half vvayes, there you ſhall find a little Iland vvith a little tree, leave that on the larboard ſide, & goe from thence in n. n. w. to the Windſtream. In the Windſtream is a good anckoring by the ſhore, except in the north end of the ſtream, there is no anckor ground. From the Draybome to the Windſtream it is about a league diſtance.

The Seugh. From the Windſtreame to the Seugh, the courſe is vv n. vv. a half league, that is a chindle or ſtonebank even with the water, run alongſt to the northvvards of it, & leave it on the larboard.

Scheggen. From the Seugh to Scheggen, the courſe is vveſt and by n. a league, run alongſt there by the ſouth ſhore. When you come againſt Scheggen, you ſhal ſee upon the point of the ſouth ſhore a little round tree, over againſt that little tree ſomevvhat more northerly then in the middle off the channell, lieth a ſuncken rock, for to avoid it you muſt run neareſt the ſouth ſhoare. The reach off Scheggen lieth through weſt, and weſt and by ſ. about an Engliſh mile, it is narrow, but hath every vvher ankor ground.

Steckholm. From Scheggen, the courſe is vveſtſouthweſt an Engliſh mile to Steck-ſound, or weſt to Kings-cleep, the Little Ilands on the ſtarboard ſide, as you ſaile to Steck-ſound, are cleane round about, ſo that you may goe on all ſides about by them.

Comming cloſe to Steck-ſound you ſhall finde a ſuncken rocke a little by ſouth the fareway. The Steeck-ſound lyeth through ſ. ſ. w. it is a ſhort Inlet about a cables length long.

VVaxholm. From Steckſound unto Waxholm it is ſ.w. weſterly above an Engliſh mile. Upon Waxholm ſtandeth the Kings Caſtle, there al the ſhips are viſited wheter they go up or down, the channell there by it, is paled to ſo near, that they can ſhut it with a beam.

VVeſterreach. From Waxholm to the Weſter rach, the courſe is weſt ſ. w. and through the Weſter reach ſouthweſt. From thence alongſt weſt to Eeldam, that is a very narrow channel a little more then a ſhips length broad.

Eeldam. From Eeldam, the courſe is weſt to Mouſeholm, which is about a league from Waxholm, men leave the high rough Mouſe-holm on the ſtarboard ſide, and run alongſt by it to the ſouthwards.

Mouſe-holm. From the Mouſe-holm to Kings-haven it is a league weſt, and weſt and by north all alongſt by the ſouthland.

Kung-haven. From Kingshaven unto the town Stockholme, the courſe is northweſt, and northweſt and by weſt alſo a league diſtance alongſt by the ſhoare. When you come before the Towne, you may anckor where you pleaſe.

Stock-holm. He that falleth to leewards, or by any other accident can not come by Landſoort into the Liet of Stockholm, he may ſail in more to the northwards through divers channels. Amongſt others there is one where men may ſaile into, and come by the great Daler into the Liet: there goeth another in by the Swedes-ſand, through it men come by Berckhaven into the Liet. The knowledge off this channell is a very hig rock, with another that is not ſo high, thereby to the ſouthwards of it, betwixt theſe two rocks goeth in this channell, it is very narrovv in the comming in, not above two ſhippes lengths broad. So ſoon as you come in within theſe rocks, you may edge up about by the loweſt, which is the ſouthermoſt, and anckor under it in very good anckerground.

From that road in the Swedes ſands the Sound goeth up firſt about northweſt, and northweſt, five leagues unto Berckerhaven into the Liet of Stockholm. This a very good channel as well for to ſayle in as out, but becauſe it is not eaſie to know, comming in out the ſea, it is ſeldom uſed.

To the ſouthwards or the weſtwards off theſe two foreſayd rocks, at the comming in of this channell, it is all lovv land. If you come from the ſouthwards, and run alongſt by that low land, ſo long untill that you begin to get the high land, you ſhall alſo run in ſight of theſe two foreſayd hommocks. About a league to ſeawards from them, lye three or four ſmall rocks; for to ſaile in there you muſt leave them on the ſtarboard ſide, and in ſayling out on the larboard ſide.

Of the Depths and grounds about theſe coaſtes.

Betwixt the ſouth ends off Oelandt and Gotland in the farewaye, it is uneven for to ſound, ſometimes men have two and twentie, three and twentie, and ſometimes againe 28, nine and twentie, and thirtie fathome, all black mingled ground, ſometimes ſtones ſo great as peaſe, of coullour like black earth.

When Howbrough is northnortheaſt ſeven leagues from you, there it is fifteen fathom deep, ſtonie ground, from thence on northeaſt two leagues, there it is twintie fathom deep, foule ſtonie ground. Neare about theſe places, ſo far from land that you can not ſee Gotland, are bancks, where it is not deeper then twelve fathome. The like uneven grounds are alſo thwarte of the ſouth ende of Oeland, as hath beene ſaide in the ſomer, but betwixte them both is deeper water. If you come in the farewaye from Rye to Bronthollom betwixt the ſouth endes of Gotland and Oeland, and muſt lye by with contrarie windes when you are in the ten or twelve fathome, and then ſayle towards Oeland, you ſhall get deeper water.

If you lye by betwixt Oeland and Reef-coll, and that Reef-coll come to bee ſouthſoutheaſt and ſouth and by eaſt from you, ſo farre without the land, that you can not ſee it, then you ſhall get alſo the like uneven grounde of tenne and twelve fathome, redde groſſe ſtonie ſand, and alſo blackiſh groſſe ſandie ſtone ground, If you bee neareſt to Oeland, you ſhal get, in 10 or twelve fathome pittes in the fallowe, ſo that it ſeemeth, that theſe grounds off Oeland doe run over unto, or neare Reef-coll. The like grounds an uneveneſſe doe ſeeme to lye over the ſea alſo from the ſouth ende of Gotland towardes Roſe-head: for when the ſouth ende of Gotlandt commeth to be about north from you, although it be fourteen or ſixteen leagues from you, you ſhall finde depth of ſixteen and twentie fathom ſoft grounde, like as of from Oeland, but if Gotland be more eaſterly or weſterly from you, you ſhall have deeper water.

When you are about a league by weſt the ſouthweſt poynt of Gotland, ſo that it be ſoutheaſt, or eaſtſoutheaſt from you about a league, then the Karels lye about north from you, which you may even ſee in cleare weather, thereaboutes it is ſhoulde water a good wayes off from the ſhoare. When the weſt poynte or ſteepe poynte is about north from you a little to the eaſtwards or to the weſtwards of it, there is 10, 12, 14, 16 and eighteen fathom deepe, a greate wayes from the land: but when that point commeth to be northeaſt, eaſtnortheaſt, or eaſt from you, there it is above the fortie fathome deepe.

Betwixt the ſouthweſt poynt of Gotland, & the north point of Oelandt it is alſo verie deepe, ſo that there you can not caſt ground with fortie fathome.

When you are northweſt and northweſt and by north about two leagues from Houbrough, there you have great redde ſtone ſand, and black ſtones in it, ſo great as beanes.

Betwixt Gotland and the Sweeds ſhares in the farewaye it is four and thirtie, ſix and thirtie, and eight and thirtie fathom deepe, and cloſe by Gotland five and twentie fathom.

When the tower of Houbrough is weſtnorthweſt from you, ſo farre as you may ſee it from the poope, there it is thirtie and one and thirtie fathom deepe, but being northnorthweſt from you it is ſhoulder, five and twentie and ſixe and twentie fathom.

Betwixt Howbrough and Eaſtergore lyeth a banck off four & twentie fathom, groſſe redde ſand, ſo farre without the Iland, that you can not ſee the land out the top. To the eaſtwards of it lyeth another banck or fourteen fathom gray and white ſand, when you are over it, you ſhal have no ground in fortie fathom.

Two leagues without the land, by weſt Eaſtergore, there it is about one and thirtie fathom ſoft ground.

He that ſayleth from Bronthollom alongſt by Oeland towards Eaſtergore, let him not ſpare his lead, but ſound often for theſe aforeſayd bancks and grounds, thereby you may wel make ſome reckoning.

If you ſhould make reckoning to come by night with Gotland on the ſoutheaſt ſide, and have no good ſight, then come no nearer the land (about the north end or ſouth end, and alſo by Eaſtergore) then in twentie or foure and twentie fathom, and ſo you can take no hurte by night. By day you may come neare enough to it at many places, in ſeven eight or tenne fathom.

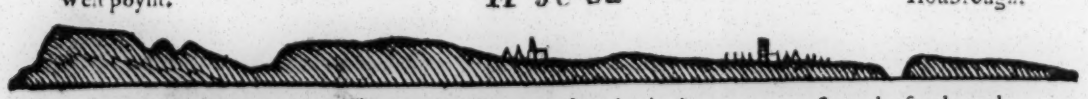
How theſe lands doe lye one from the other, and from other lands.

From Houbrough to Eaſtergore northeaſt	12 or 13 leagues
From Eaſtergore to Faro-ſound north and by eaſt	7 leagues
From Faro-ſound to Gotſche ſand n.n.e. and north and by e.	6 or 7 leagues
From Houbrough to the Karels northnorthweſt	7 leagues
From the Karels to Wisbuy northnortheaſt	7 leagues
From the Karels to Gotſche ſand northeaſt	21 leagues
From Houbrough to the north ende of Oeland northweſt	12 leagues
From the Karels to the Sweedes Ionckvrow weſt and by north	11 leagues
From the Karels to the channell of Stockholme north,	21 leagues
From the Karels to Boechſchaer northeaſt	40 leagues
From Gotſche ſand to Boechſchaer north and by eaſt	20 or 21 leagues
From Gotſche ſand to the ſouthpoynt off the Alands haff north and by eaſt	33 or 34 leagues
From Gotſche ſand to Wittoy northeaſt	37 leagues
From Gotſche ſand to Dagerorte eaſt and by north	7 leagues
From Gotſche ſand to Derwinde ſoutheaſt and by eaſt	31 or 32 leagues
From Eaſtergore to Dagerorte northeaſt, and by eaſt	37 leagues
From Eaſtergore to Derwind eaſt and by ſouth,	27 leagues
From Eaſtergore to Quinsbrough deepe ſouth and by eaſt,	50 leagues
From Eaſtergore to Roſe-head ſouth and by weſt	45 leagues
From Houbrough to Hondſorte e. n. e. and northeaſt and by eaſt	47 leagues
From Houbrough to Lyſerorte eaſt and by north, ſomwhat eaſterly	40 leagues
From Houbrough to Der VVinda e ſt and by north	37 leagues
From Houbrough to Dermemell ſoutheaſt and by eaſt,	40 leagues
From Houbrough to Quinsbrough deep ſouthſoutheaſt	48 leagues
From Houbrough to Roſe-head ſouth	34 leagues
From the north end of Gotland to Derwinda eaſtſoutheaſt	29 leagues
From Calmer to Scheggenes northnortheaſt	4 leagues
From Scheggenes to the Sweedes Ioufer northnortheaſt	7 leagues
From the Swedes Ioufer to Ideſound, the channell of Weſterwyke, or Silbuy, north and by weſt, ſomewhat weſterly	8 leagues
From the Swedes Ioufer to Northeroorden, the north end of Oeland eaſt and by north	3 or 4 leagues
From Northeroorden to the channell of Weſterwyke northweſt	9 leagues
From Northeroorden to the Barſound, north and by weſt	16 leagues
From Northeroorden to the Hevering, or the channel of Nycopping n.	21 leag.
From Northeroorden to Hartſoe north and by eaſt,	23 leagues
From Northeroorden to Landſoort northnortheaſt	23 or 24 leagues
From Hevering to Landſoort eaſtnortheaſt	7 or 8 leagues

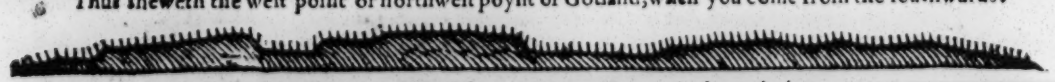
How theſe Lands doe ſhew them ſelves at ſea.

11 JU 62

Weſt poynt. Houbrough.



Thus ſheweth the weſt point or northweſt poynt of Gotland, when you come from the ſouthwards.



VVhen Gotſche ſand is northeaſt from you two leagues it ſheweth thus.



In this forme ſheweth the land a little to the weſtwards of Eaſtergore, when that poynt is a great league weſt from you, there is four and twentie and five and twentie fathom deep, ſoft ground.



Eaſtergore being a league weſt from you, ſheweth thus, there it is five and twentie fathom deepe.

FINIS.